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# ASIAN

RESULTS OF THE SWEDISH EXPEDITION

1922-1923

BY PER CARLSON

CHINA

YUNNAN

SIAM





Svenska Asine expeditioner.

# ASINE

## RESULTS OF THE SWEDISH EXCAVATIONS 1922—1930

by

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STOCKHOLM 1938

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## P R E F A C E

In presenting the publication of the Swedish Expedition at Asine to the readers, the Asine Committee hope that the results obtained in the field, in spite of the time which has elapsed since the work was concluded, will still be of interest and add important and fresh material to our knowledge of the prehistoric and historic archaeology of Greece.

When the work started in the field the leaders of the expedition were confronted with quite foreign and new conditions, to which methods of excavation, established in Sweden, had to be applied. At the beginning of the work this caused a certain amount of hesitancy, especially as regards the excavation of the architectural remains, so different from the prehistoric dwellings in the Nordic countries.

Sweden has no archaeological institute in Athens like all the big nations which carry out excavations in Greece. In order to benefit from the archaeological work carried out, the excavations at Asine were in a sense used as a substitute for such an institute to the effect that a large number of students were invited to take part in the work, young scientists who thus for the first time were given an opportunity to get into contact with practical field work on Classical ground. It is needless to say what this has meant to the present young generation of archaeologists in Sweden, and how much it has promoted Classical studies in the country. Swedish excavations on Classical soil have later on been continued on several sites, both in Greece and elsewhere, by archaeologists who had gained their first experience in the field at Asine. The hospitality and kind assistance accorded to all these undertakings from various archaeological institutions abroad is here gratefully acknowledged by the Committee.

## P R E F A C E

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The Committee wish likewise to express their thanks to the authorities of Greece as well as to many private persons of the country for their interest in the researches which have promoted the work in many ways.

The lack of a Swedish institute at Athens and the special conditions under which the investigations were carried out may to some extent have come to light in the present publication, because the observations in the field were made by so many different collaborators. The coordination of notes, measurements, and plans has therefore presented special difficulties. The Committee hope nevertheless that those difficulties will not be too obvious in the present volume and that inconsistency and unevenness in the text and plans have been removed as far as possible. — For reasons of space it has been found advisable to omit the publication of the coins found during the excavations and also the inscriptions and a large number of seal impressions of Hellenistic and Roman date. These sections will be dealt with in separate monographs by Professor Persson, and the reader is for the present referred to them. The remarkable inscription on a Late Helladic III potsherd from the Lower City has already been published by Prof. Persson, and reference is here made to his publications on the subject.

The text is written by the two leaders of the expedition. Doctor O. Frödin, having been in charge of the technical part, is responsible for the chapters on the progress of the excavations and the observations made in the field, etc. (pp. 9—58 and pp. 113—198); Professor A. W. Persson has been in charge of the finds (pp. 199—438). Besides these parts special articles have been written, one on the Roman Bath by Doctor H. Arbmán (pp. 105—112); and the other on the description and analysis of the architectural remains in the Lower City, by Doctor A. Westholm (pp. 59—105). Dr. Westholm has also revised all the manuscripts, proofs, and illustrations for the printer, controlled the plans, etc., and thus acted as editor. — The bulk of the MSS have been translated into English by Mr. W. Savage, the text being afterwards revised by Miss Helen Thomas of the British School at Athens. It is due to her knowledge and meticulous work that the current archaeological terminology is found in the present volume. Miss M. Hallberg of the Cyprus Collections in Stockholm has prepared the Index and also assisted in arranging the illustrations for printing. The plans and drawings have been made after the originals by Messrs. H. Faith-Ell, J. Lindros, and, the bulk of them, by Mr. B. Millberg, Stockholm, who also rendered good assistance in controlling the whole material of plans, drawings, etc. Mr. S. Borglind, Falun, has done the paintings reproduced in Colour-Plates I—III after the originals in Nauplia.



## P R E F A C E

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The printing of the publication was entrusted to the Generalstabens Litografiska Anstalt, Stockholm.

From private persons interested in archaeological research the Committee have received financial support without which it would have been impossible to carry out the excavations as well as edit the present publication. Except from the supporters of the field operations, mentioned on p. 10, the Committee have thus received financial support for the publication from Messrs. Karl Eliasson († 1934), Stockholm, Oscar Haupt, Stockholm, Anders Hellström, Göteborg, and Erik Lundin († 1934), Stockholm. Furthermore, the paper for this volume was given by Mr. Oscar Haupt, Stockholm.

To all these persons who have actively taken part in the work, and to many others who have promoted the work in some way or other, the Committee wish to express their heartiest thanks.

Finally, the Committee wish to honour posthumously two of their members, namely Mr. Bernhard Salin, the King's Custodian of Antiquities, and Professor Lennart Kjellberg, whose regretted death prevents them from seeing the results of the work in which they took such a keen interest.

Stockholm, May 1938.

GUSTAF ADOLF

*Oscar Almgren*

*Axel Hallin*

*Martin P:n Nilsson*



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Asine. M. H. II jar. (From a painting by S. Borglind).

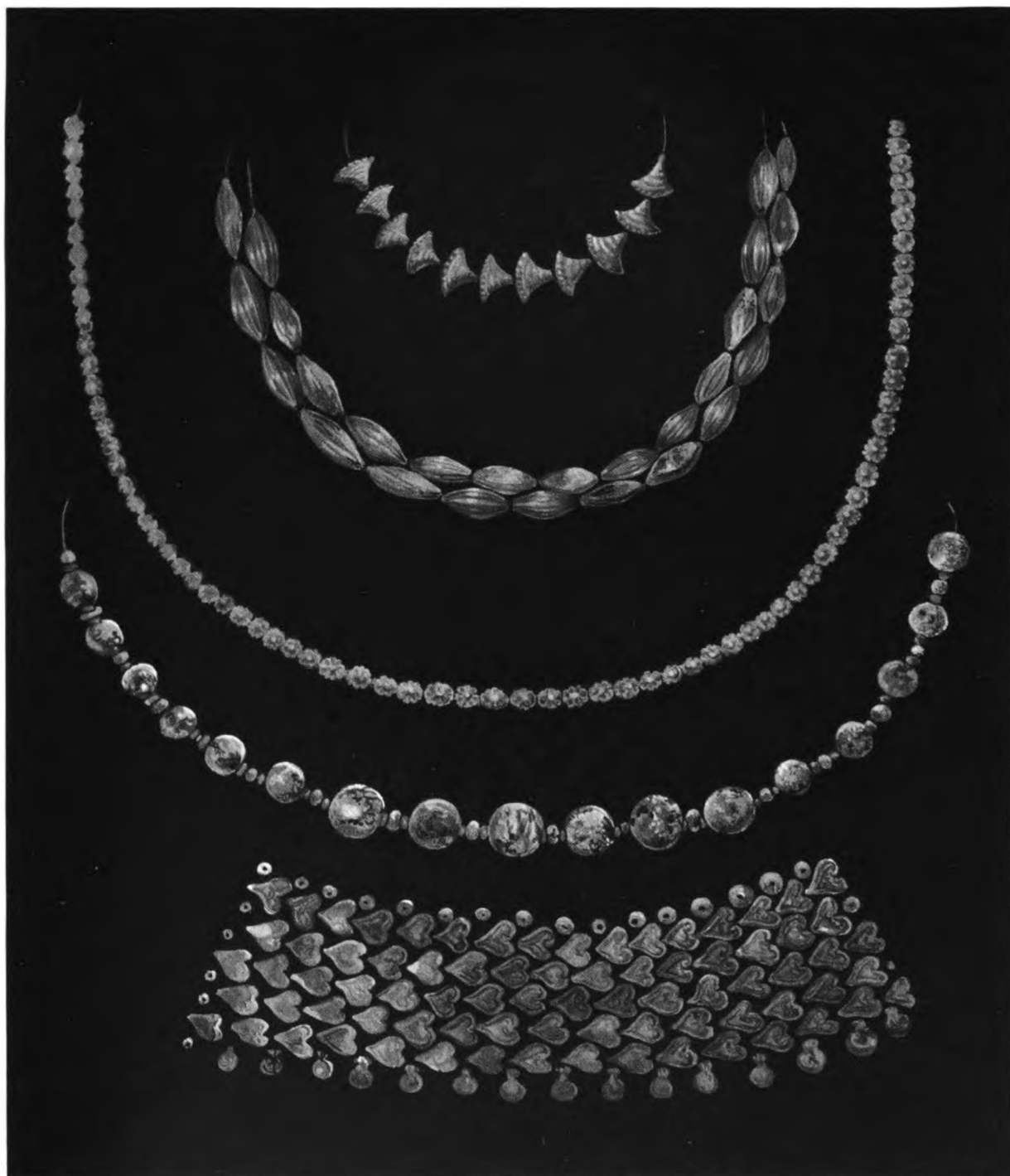




Asine. M. H. III jar. (From a painting by S. Borglind).







Asine. Jewellery from Chamber-tomb I:5. (From a painting by S. Borglind).



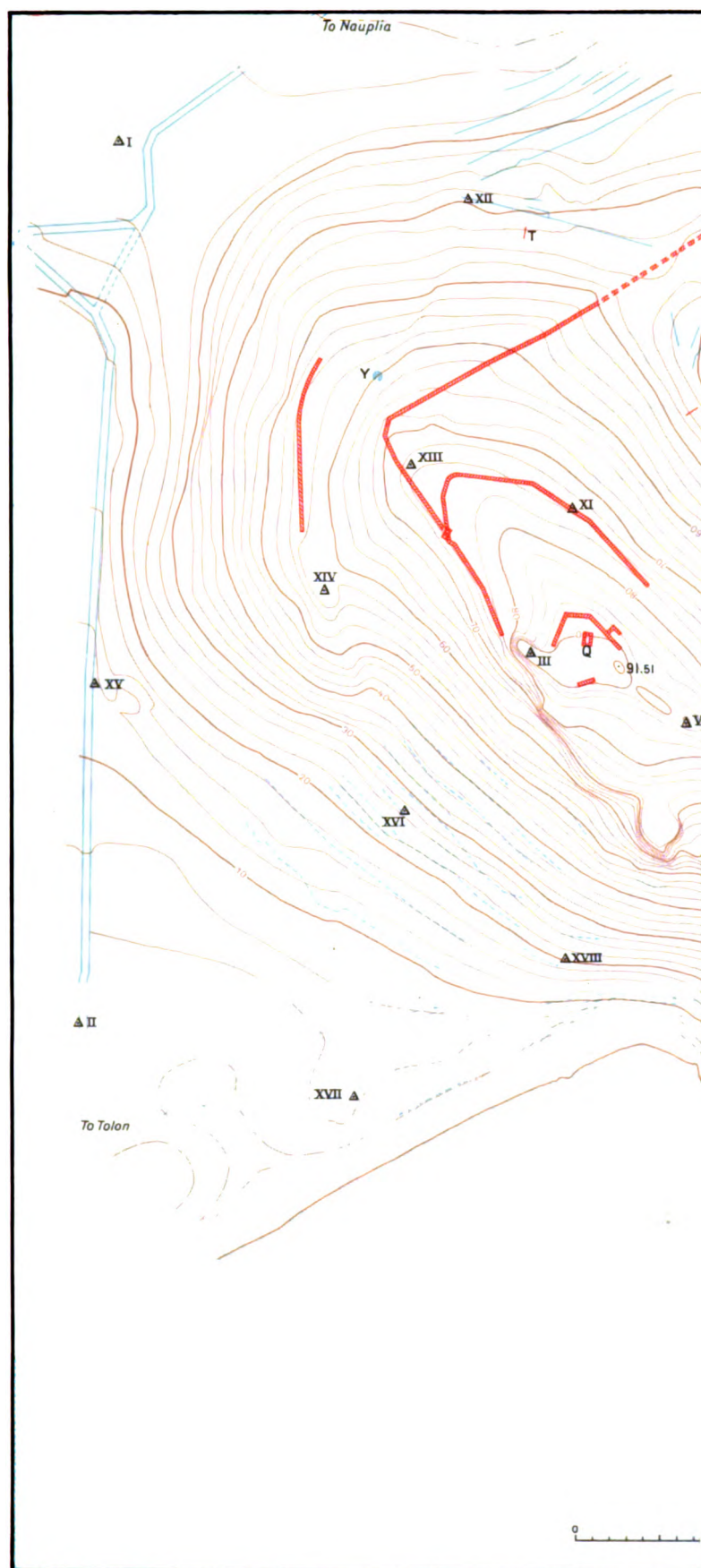


Fig. 1.



# INTRODUCTION

BY OTTO FRÖDIN

## 1. PREAMBLE TO, ORGANISATION AND PROGRESS OF THE ASINE RESEARCHES

The initiative for the Swedish Asine researches was taken in the year 1920 by H.R.H. Crown Prince Gustaf Adolf. While travelling in Greece in the autumn of that year he visited Asine in the company of the well-known Greek scientist, Professor J. Svoronos, and then there occurred to him the idea that Sweden, by making excavations here on a large scale, might make her own contribution to the international research work on classical soil.<sup>1</sup>

The idea was received with the most sympathetic interest by the Greek authorities. His Royal Highness asked now Professor Persson, who at that time was at the French Archaeological School in Athens, to inquire on the spot into the possibility of such an excavation; and the result of this was a fully confirmatory report.<sup>2</sup> In the spring of the same year the French School however, through its member, Mr. L. Renaudin, had inspected the site and carried out some preliminary mapping<sup>3</sup> and so possessed the first right to carry out excavations there. With the utmost kindness the School now renounced its rights, and after the Greek Archaeological Society had given its unanimous consent, the Greek Government's official sanction for the Swedish excavations at Asine was given early in 1921.

His Royal Highness' enthusiasm for the scheme naturally met with the most cordial response in his native country, and it is worthy of mention that the grand old man of Swedish archaeology, Oscar Montelius, during the last months before his death managed to devote a deal of work and enthusiasm to the organisation of the enterprise. A few weeks later (on the 25th November, 1921) at His Royal Highness'

<sup>1</sup> Previously, only Lennart Kjellberg, and Sam Wide had had an opportunity to carry out research work in Greece, at Aphidna in Attica (cf. *Athenische Mitteilungen* XXI, p. 385 ff.) and on Poros-Kalaureia (cf. *Ath. Mitt.* XX, p. 267 ff.).

<sup>2</sup> Cf. Axel W. Persson, *Asiné. Recherches préliminaires en vue de fouilles suédoises*, in *Bulletin de la Soc. des Lettres de Lund* 1920—1921, p. 17 ff.

<sup>3</sup> See L. Renaudin, *Note sur le site d'Asiné en Argolide*, in *Bulletin de Corresp. Hellénique* 1921, p. 295 ff.

request the Committee met, which took over, and has since then uninterruptedly dealt with, the matters connected with the enterprise. His Royal Highness was chairman, and among the other members were Professor Oscar Almgren, Uppsala, the Court Chamberlain Axel Hallin, Stockholm (treasurer), Professor Lennart Kjellberg († 1936), Uppsala, Professor Martin P:n Nilsson, Lund (secretary) and the King's Custodian of Antiquities Bernhard Salin († 1931), Stockholm.

By this time the funds necessary for a first expedition to Asine had been collected and during the following years further large sums of money have been received, enabling the work to be continued. The Asine research is thus indebted to the Swedish Government (18 072 crowns), the University of Lund (1 000 cr.), Kungl. Vitterhets Historie och Antikvitets Akademien (2 000 cr.), Kungl. Vetenskapssamfundet in Lund (5 000 cr.), Vetenskaps societeten in Lund (2 000 cr.), Lars Hierta's Minne (2 000 cr.), Frans Ekelund, City Architect at Landskrona (7 000 cr.), Director Birger Fogelberg, Gävle (5 000 cr.), E. Hakon-Pettersson, engineer, Landskrona (10 000 cr.), Court Chamberlain Axel Hallin, Stockholm (25 000 cr.), Ex-Envoyé Count Herman Wrangel (5 000 cr.), and four anonymous donors (together 40 000 cr.), a sum of 122 072 crowns in all. The State, public institutions, limited companies and private persons have furthermore by gifts or loans in natura made valuable contributions towards the equipment of the expeditions — the main part of the equipment being brought from Sweden. The Swedish State Railways carried free of charge the 1926 find masses from Malmö to Stockholm, and the Swedish Orient Line has repeatedly placed its steamers at the disposal of the expeditions for the free transport of goods between the Piraeus and Gothenburg.

The first Asine expedition, which was naturally employed in trial or exploratory excavation, worked on the site during the period from the 25th March, to the 15th May, 1922, and was succeeded by a second one during the autumn of the same year (11th Sept. to 8th Nov.<sup>1</sup>). A third campaign took place during the spring and early summer of 1924 (16th April to 30th June),<sup>2</sup> a fourth during the spring and early summer of 1926 (8th March to 10th July), and finally a fifth and last during part of the spring in 1930 (11th March to 12th April). A more summary account of the researches carried out in different parts of the very large working area, in the course of these campaigns, is given on page 25.<sup>3</sup>

The leadership of these five expeditions has been jointly in the hands of the two chief authors of this publication. As assistants have taken part Mr. Holger Arbman (1924, 1926, and 1930), Mrs. Dagny Arbman (1930), Messrs. C. H. J:sen Carlén (1922), Sven Erlandsson (spring and part of autumn 1922, 1924, and part of the 1926 cam-

<sup>1</sup> See Axel W. Persson, *Aperçu provisoire des resultats obtenus au cours des fouilles d'Asiné faites en 1922*, in the *Bulletin* 1922—1923, p. 25 ff.

<sup>2</sup> The results of the 1922—1924 researches were submitted in a preliminary form in the year 1925. See Otto Frödin and A. W. Persson, *Rapport préliminaire sur les fouilles d'Asiné 1922—1924*, in the *Bulletin* 1924—1925, p. 23 ff.

<sup>3</sup> Cf. also Persson's popular work *Asine*, Uppsala 1931.

paign), Einar Gjerstad (1922), Krister Hanell (1926), Gunnar Hultin (autumn 1922), Ernst Kjellberg (1924), Erik Knudtzon (1926), Neander Nilsson (1924 and 1926), Nils Palmgren (spring 1922), Erik Salvén (a shorter period of the 1924 campaign), Erik Sjöqvist (part of the 1926 campaign), Gösta Säflund (part of the 1926 campaign) and Natan Svensson Valmin (1924 and 1926); as draughtsmen Messrs. Harald Faith-Ell (1922), Hjalmar Larsen (1930), Olov Källström (1924), and Alfred Westholm (during the 1926 campaign and also during the period 12th Oct. to 8th Nov. of the same year); as cartographers Messrs. Erik Ljungner (1924) and Hjalmar Larsen (part of the 1926 campaign), the former with Messrs. Per Janse and Erik Lindskog as assistants. The custodian of the museum at Nauplia, Mr. Nic. Grimanis, acted as supervisor of the labourers, both male and female, whose number varied considerably (during the spring of 1922 from 20 to 30, during the autumn of the same year from 30 to 40, during the 1924 campaign 15 to 20, in the year 1926 from 20 to 50, and in the year 1930 from 5 to 10).

The participators in the 1922 autumn expedition had the great benefit and pleasure of having the chairman of the Asine Committee in their midst during a great part of the campaign. For about six weeks every day, H.R.H. the Crown Prince took part in the work, accompanied by the treasurer of the Committee, who had already made himself familiar with the prevailing conditions by a visit to the site during the spring campaign, his adjutant, Captain Count C. G. D. Hamilton, and, during a brief period, by the curator at the National Museum in Stockholm, Mr. Erik Wettergren.<sup>1</sup>

In the course of the campaign the place has been visited by a large number of Greek and other foreign archaeologists, among others the directors of several of the foreign institutions in Athens. Particular mention should be made of the visit paid during the autumn of 1922 by the then Director of the British School there, Mr. A. J. B. Wace, who for several days took part in the work, and put his expert knowledge, in particular his knowledge of the prehistoric period in Greece, at the service of the Swedish researches.

Mention should also be made of the very notable visit paid during the 1926 campaign by Mr. Pangalos, at that time President of Greece.

As a comparatively large number of expertly trained assistants took part in each expedition, it was possible to make a preliminary examination of the finds during the actual fieldwork. However, the more thorough study of this vast, not to say enormous, bulk of material, weighing at least 30 tons, and consisting mainly of potsherds, was carried out after each campaign.

Thanks to the great kindness of the Greek Government, the Asine Committee, in the autumn of 1922, received permission to convey that year's total finds to Sweden as a loan, for three years, for the purpose of dealing with them there; by this means

<sup>1</sup> Cf. Erik Wettergren, in *Art and Archaeology* 1926, p. 266 ff.

the difficulties entailed, for an enterprise of this kind in the lack of a Swedish Institute in Athens, were to some extent counteracted and relieved. Consequently, when the 1924 expedition left Sweden, the finds had been studied at Lund under the supervision of Mr. Persson. Later, during the spring of 1925, a selection of the finds, illustrated by many photographs and plans, became accessible to the general public at an exhibition organised by Mr. Frödin, with the assistance of Mr. Ernst Kjellberg, at the National Museum in Stockholm.<sup>1</sup>

As regards the still richer finds from the 1924 expedition, a similar export permit could unfortunately not be obtained under the political conditions then prevailing in Greece so the work on them had to be done at Nauplia during the summer of 1925, where it was in the hands of Mr. Persson, with the assistance of Messrs. Neander Nilsson and Natan Svensson Valmin. But in 1926 the political situation had again changed. The Asine Committee once more received permission to take home as a loan, for three years, the extraordinarily rich material from that year's campaign, and it was dealt with at Uppsala, still under the supervision of Mr. Persson. On the other hand, the finds from the short 1930 campaign were dealt with in Greece.

Not least in consideration of the great financial sacrifices made by Sweden for the Asine researches, the Asine Committee wished to obtain for Swedish collections a due share of the finds collected. After lengthy negotiations the Committee has received, on certain conditions, first, a considerable part of the finds from the chamber-tomb No. 1 on the Mycenaean necropolis I (p. 151) inter alia the bulk of the vase material, secondly, 11 vases from other parts of the field of research, and thirdly, the bulk of the potsherds. While these last are intended for distribution amongst various Swedish institutions and collections, the remainder has already been handed over to the Statens Historiska Museum in Stockholm. That part of the Asine finds which has been kept by the Greek Government, is housed mainly in the museum at Nauplia.

But a vast amount of anthropological material too, was brought to light by the excavations of the different expeditions. The bulk of this was, however, in such a poor condition that it could not be thoroughly investigated, indeed, a large part could not even be removed. However, some part of the skeletal material from the 1926 expedition was in such a good state of preservation that — after being overlaid with plaster — it could, together with the other finds, be brought home to Sweden. The Asine Committee were then fortunate enough to be able to entrust this valuable material to the exceptionally expert hands of Professor Carl M. Fürst, and in 1930 he published the results of his wide researches in the work entitled »Zur Anthropologie der prähistorischen Griechen in Argolis».<sup>2</sup>

<sup>1</sup> Cf. Frödin, Utställning av fynd och bilder från Asine, National Museum Catalogue No. 18, Stockholm 1925.

<sup>2</sup> In Lunds universitets årsskrift, N.F., Section 2, Vol. 26, No. 8. — Cf. also the same author, Über prähistorische Schädel aus Argolis, in Verhandl. d. Gesellschaft f. Phys. Anthropologie 1930, p. 3 ff.





Fig. 2. General map of the Bay of Argolis (after Schliemann).



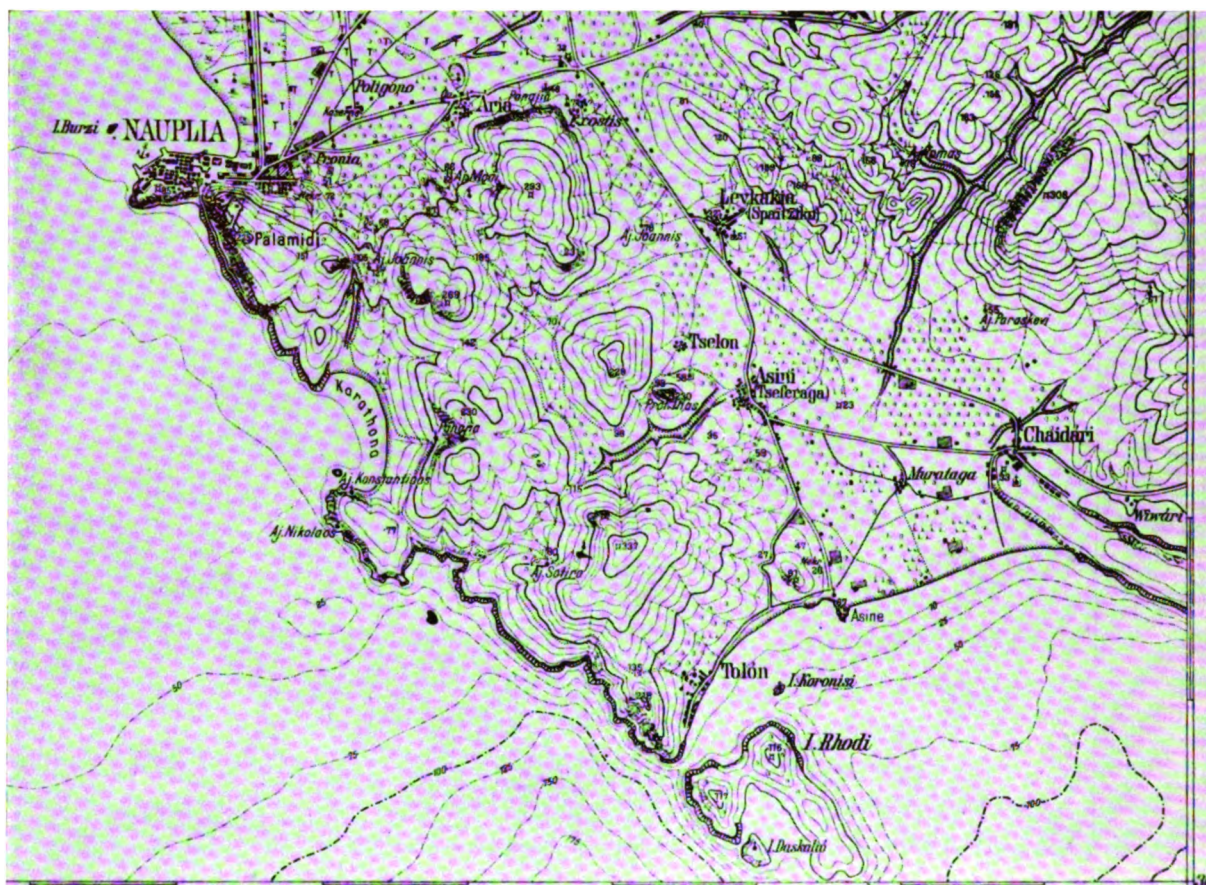


Fig. 3. General map of the environs of Asine (after Lehmann).

## 2. ASINE IN LITERATURE

We encounter the name Asine already in the Iliad. The Catalogue of Ships, in the list of towns and places in Greece which had sent vessels and armies against Troy, mentions, together with Argos, Tiryns »of the great walls», Troizen, Eïonai and Epidauros »full of vines», also Hermione and Asine »that dominate the deep gulf».<sup>1</sup> With these few words the marine character of the two cities is emphasized. »The deep gulf» refers either to the Sinus Argolicus, at the mouth of which lay Hermione with its comparatively large surrounding country and, further in, Asine (Asinaia), or the two smaller gulfs which with their deep water and sheltering islands offered good harbours both at Hermione and Asine (figs. 2 and 5).

Strabon says about Asine and about some of its neighbours:<sup>2</sup>

»Then (sc. after Nauplia) come other places, and next after them the Hermionic Gulf; for, since Homer assigns this gulf also to Argeia, it is clear that I too should not overlook this section of the circuit. The gulf begins at the town of Asinê. Then come Hermionê and Troezen; — — —.»

He says further, VIII 6:

»11. — — — But the Argives laid waste the most of the cities because of their disobedience; and of the inhabitants those from Tiryns migrated to Epidauros, and those from [Midea?] to Halêis, as it is called; but those from Asinê (this is village in Argeia near Nauplia) were transferred by the Lacedaemonians to Messenia, where is a town that bears the same name as the Argolic Asinê; for the Lacedaemonians, says Theopompus, took possession of much territory that belonged to other peoples and settled there all who fled to them and were taken in. And the inhabitants of Nauplia also withdrew to Messenia.

12. Hermionê is one of the important cities; and its seaboard is held by the Halêis, as they are called, men who busy themselves on the sea. And it is commonly reported that the descent to Hades in the country of the Hermionians is a short cut; and this is why they do not put passage-money in the mouths of their dead.

It is said that Asinê too was a habitation of the Dryopians — whether, being inhabitants of the regions of the Spercheius, they were settled here by the Arcadian Dryops, as Aristotle has said, or whether they were driven by Heracles out of the part of Doris that is near Parnassus. As for the Scyllaeum in Hermionê, they say that it was named after Scylla, the daughter of Nisus, who, they say, out of love for Minos betrayed Nisaca to him and was drowned in the sea by him, and was here cast ashore by the waves and buried. Eiones was a village, which was depopulated by the Mycenaeans and made into a naval station, but later it disappeared from sight and now is not even a naval station.»

Strabon speaks thus of »the town of Asine», »a habitation of the Dryopians», as destroyed by the Argives; at his own time, it was only »a village (χώμη) near Nauplia» and situated at the sea for »the gulf begins» there.

Ptolemaios, too, mentions in his Geography Asine, but peculiarly enough together with some places located in the interior of Argolis (Ἀργεῖας μεσόγειοι). This may perhaps not be due to an error; it might indicate that the name of Asine at his time had been adopted by some place located in the interior of the country<sup>4</sup> perhaps

<sup>1</sup> Il., II 559 ff.: Οἱ δ' Ἀργεῖς τ' ἔχον Τύρινθ' ἀ τε τεχνήσσαν,  
Ἑρμιόνην, Ἀσίνην τε, βαθὺν κατὰ κόλπον ἐχούσας,  
Τροίεζ' ἠὲ Μυῖνας τε καὶ Ἀμπελόεντ' Ἐπίδαυρον.

<sup>2</sup> Strabon, VIII 6.3. Translation by H. L. Jones, London and New York 1927.

<sup>3</sup> Ptolemaios, III 16: 20.

<sup>4</sup> Cf. Curtius, below, p. 17.

in the vicinity of the village about 2 kilometres to the N. N. W. of ancient Asine, a village at present called Asine but which only a few years ago had the old Turkish name Tsafer-Aga.<sup>1</sup>

The statements rendered of Homeros, Strabon and Ptolemaios are rather scanty. More explicitly speaks Pausanias about Asine, both of its position and its own fate and that of its inhabitants. He says;<sup>2</sup>

«4. From this point (sc. Didymi) begins a district once called Asinaea; it belongs to Argos. There are ruins of the town of Asine beside the sea. When King Nicander, son of Charilus, son of Polydectes, son of Eunomus, son of Prytanis, son of Eurypon, marched at the head of a Lacedaemonian army into Argolis, the Asinaeans joined him and helped to lay waste the country. But when the Lacedaemonian force had retired home, the Argives under King Eratus took the field against Asine. 5. For a while the Asineans made a stand behind their walls; and some of the Argives fell, including Lysistratus, one of their foremost men. But when the walls were carried the Asinaeans embarked with their wives and children on ship-board, and abandoned their native land. The Argives razed the city to the ground and annexed its territory to their own, but they suffered the sanctuary of Pythaeon Apollo to stand, and it may be seen to this day. Beside it they buried Lysistratus.»

At the time of Pausanias old Asine, possibly with the exception of the temple of Apollon Pythaios lay in ruins and, consequently, it was a rather unimportant place. This statement agrees both with the quotations of Strabon and Ptolemaios, mentioned above and also with the observations made in connection with the Swedish investigations (cf. below, p. 100).

Pausanias says further:<sup>3</sup>

«9. The people of Asine were originally neighbours of the people of Lycorea on Mount Parnassus, and were named Dryopians after their founder. This name they preserved when they came to Peloponnese. But two generations afterwards, in the reign of Phylas, the Dryopians were conquered in battle by Hercules and brought to Delphi as an offering to Apollo. But in obedience to an oracle which the god gave to Hercules they were brought to Peloponnese, where they first occupied Asine, near Hermion: being driven thence by the Argives they settled in Messenia by the permission of the Lacedaemonians, and, in course of time, when the Messenians were restored, the Asinaeans were not expelled from their city. 10. But what the Asinaeans say about themselves is this. They admit that they were conquered by Hercules in battle, and that their city on Parnassus was taken; but they deny that they were made prisoners and brought to Apollo; they say that when the walls were captured by Hercules they abandoned the city and fled to the peaks of Parnassus; afterwards, having crossed in ships to Peloponnese, they threw themselves on the protection of Eurystheus, who, being a foe of Hercules, bestowed on them Asine in Argolis.»<sup>4</sup>

11. The Asinaeans are the only people of the stock of the Dryopians who still pride themselves on the name. Herein they differ from the people of Styra in Euboea, who are also Dryopians by descent, but took no part in the fight with Hercules because they dwelt far from the city. But the Styrians scorn to be called Dryopians, just as the Delphians shrink from being called Phocians. Whereas it gives the Asinaeans the greatest pleasure to be called Dryopians, and it is plain that they have founded their holiest sanctuaries in memory of their old sanctuaries on Parnassus; for they have both a temple of

<sup>1</sup> Attempts have been made to identify ancient Asine with this New-Asine chiefly on basis of some investigations which were supposed to have been made there by a certain Mr. Kofiniotis at the beginning of this century (cf. *Wochenschr. f. kl. Philologie* 1903, Sp. 1357 f., and Kiepert, the text to *Formae orbis antiqui*, XIII). The notes in the *Wochenschrift* are based upon an article in *Vossische Zeitung*, containing phantastic notes about the finds. In reality the rather unimportant excavations of Mr. K. were made at ancient Asine (cf. below, p. 31; Persson, *Bulletin* 1920-1921, p. 19).

On Ptolemaios' map of Greece (Rome edition of 1490) is Asine marked between Argos and Mycenae. But this does by no means indicate that Asine was situated there in the days of Ptolemaios as there are many places erroneously located on the map not least so in the Argolid.

<sup>2</sup> Pausanias, II 36: 4-5; see also II 28: 2 and III 7: 4. Translation of J. G. Frazer, London 1898.

<sup>3</sup> Pausanias, IV 34: 9-12; see also IV 8: 3, IV 14: 3, IV 24: 4 and IV 27: 8.

<sup>4</sup> Cf. Diodorus Sic., IV 37.

Apollo and a sanctuary of Dryops with an ancient image. They also celebrate mysteries every other year in honour of Dryops, whom they affirm to be a son of Apollo. 12. The city, too, stands by the sea just like their old Asine in Argolis — — —.

In Messenia, on a rocky promontory jutting out into the Messenian Gulf, the new Asine was founded. The locality has been identified with the present Koroni<sup>1</sup> and shows really, as Pausanias — and also Curtius<sup>2</sup> — points out, a striking similarity of situation to the Argolic Asine.

The Venetian geographers of the 17th century seem to have known the site Asine to judge by the following note:» — — — Stadt Asine, so von den Lacedæmoniern zerstöret worden, derer Rudera noch an dem Meer zu sehen — — —.<sup>3</sup> It is of importance that the city is located to the sea and the quotation can therefore not be referred to the present village Asine nor to the site on the plain of Kandia. Possibly though, the note is taken over directly from Pausanias. On maps of the 17th and 18th centuries (e. g. that of Homann) Asine is marked on various places on the shore between Nauplia and Hermione.

As regards the exact position of the Argolic Asine, there existed, however, until some time in the 19th century, a certain amount of uncertainty. The question was first finally answered by Curtius. He says:

«Von der Mündungsebene von Bedéni gegen Westen am Ufer fortgehend, gelangt man in eine kleine Ebene von gleicher Beschaffenheit und gleicher dreieckiger Form; es ist die Ebene von Kandia, in welche aus dem heiligen Thale des Asklepios durch rauhes Bergland ein Giessbach herabströmt. Dann folgt die Felsenbucht von Kaídári, von welcher sich ein flacher Strand bis zu der Halbinsel von Nauplia erstreckt, welche den äusseren Meerbusen vom inneren scheidet.

Diese beiden Strandebenen mit der eingeschlossenen Bucht bildeten die alte Asinaia. Den Hauptort dieser Küstenlandschaft sucht man zunächst in der Ebene von Kandia,<sup>4</sup> wo in der oberen Ecke eine alte Burg mit polygonen Mauern steht; am Fusse der Burghöhe entspringt eine durch Wasserfülle ausgezeichnete Quelle. Südöstlich davon an der Gränze der Epidauria erhebt sich zwischen zwei Lagunen ein Hügel mit den Grundmauern eines alten Tempels, von dem man zwei Abteilungen erkennen kann. Aber die Kandiaebeue hat keinen natürlichen Hafen; ferner liegt die alte Burg nicht hart am Meere, wie es von Asine die Alten ausdrücklich melden, noch nahe bei Nauplia. Die letztere Bezeichnung führt uns vielmehr an die südöstliche Spitze des Gebirges von Nauplia, wo auf einem von drei Seiten umspülten Felsen eine alte Burg von polygonen Mauern steht, mit Resten verschiedener Zeiten bedeckt. Der durch vorliegende Inseln wohlgeschützte Hafen ist Port Tolon (Aulona?), vielleicht sogenannt von der engen, aber sehr fruchtbaren Ebene, welche sich vom Meere in das Binnenland hineinzieht. Auf der Burghöhe erkennt man in einer Kapelle einen alten Tempel, die Unterstadt dehnte sich in die östliche Ebene aus. Jetzt schmückt den Fuss des Berges ein Citronenwald von etwa tausend Stämmen; eine kretische Kolonie hat sich an dem schön gelegenen Hafenplatze angebaut.

Ich glaube nicht zu irren, wenn ich hier die Stätte von Asine erkenne. Die Dryoper liebten solche Felsungen; darum suchten die Lacedämonier ihnen auch zum Zufluchtsorte einen ähnlichen Seeplatz am messenischen Gestade aus. Neu-Asine hatte, wie ausdrücklich erwähnt wird, dieselbe Lage wie die alte Stadt, und in der That gleicht der Burghügel von Koróni der felsigen Halbinsel von Port Tolon. Asine, das hermionische, wie es des dryopischen Vororts wegen genannt wurde, musste eine der ersten

<sup>1</sup> Ernst Curtius, *Peloponnesos II*, Gotha 1852, p. 167 f.; see however Natan Valmin, in the *Bulletin* 1934—1935, p. 44 ff.

<sup>2</sup> See below.

<sup>3</sup> (Marco Vincenzo) Coronelli, *Neu-vermehrte Beschreibung der trefflichen Halb-Insel Morea, etc.* Nürnberg 1687, p. 60.

<sup>4</sup> Curtius, l. c., p. 465 f.

<sup>5</sup> Thus e. g. E. Puillon Boblaye, *Recherches géographiques sur les ruines de la Morée*, Paris 1835, p. 51. William Martin Leake, again, is less decided in his opinion; see *Travels in the Morea II*, London 1830, p. 463 f.

Eroberungen der Argiver sein, welche nach erbittertem Kampfe nur das Heiligthum des Apollon Pythaeus stehen liessen; die Stadt lag, als Pausanias reiste, über tausend Jahre in Trümmern; ihr Name war auf ein argivisches Dorf übergegangen.

In der Ebene von Kandia lag vielleicht Eïon oder Eïones. Dann würde sich die Nachricht Strabons erklären, dass dieser Seeplatz von den Mykenäern als Ankerbucht benutzt worden sei. — — —.

Bursian refuses, as late as the year 1868, to make any pronouncement on the question,<sup>1</sup> but since then Curtius' opinion has been generally accepted. E. g. by Schliemann, who in the course of his researches at Mycenae and Tiryns clearly had his attention directed to Asine, and in his Tiryns-monograph<sup>2</sup> gives quite a thorough account of his observations on the place, an account which should be included here.

»Of the neighbouring towns, which certainly flourished contemporaneously, and probably also were destroyed at the same time as Tiryns and Mycenae, I must allude to the citadel of the old town of Asine, which lay about eight kilometres to the south-east of Tiryns on the sea-shore — — —,<sup>3</sup> of which the walls, partly built of neatly-fitted polygonal blocks and partly of layers of trapezoids uneven in level, are still better preserved than those at Tiryns. Colossal towers, projecting about 7 m. and 12 m. broad, give the walls an imposing appearance. The terrace of the fortress, where apparently most of the buildings stood, is 37.50 m., the highest point 50 m., above the sea. On the terrace are still evident the foundation walls of many chambers, formed of unhewn Cyclopean stones. In the middle of one of these, which is 5.80 m. long and 3.30 m. wide, may be seen a great rough hewn stone 0.60 m. in diameter, in which is a hollow 0.24 m. long, 0.10 m. broad, and 0.15 m. deep. In many places the rock is skilfully smoothed for building purposes; there is also a large cistern hollowed out in pear shape, whose opening is 1 m. in diameter; there are besides three smaller cisterns. Asine was the old town of the Dryopes, and is mentioned in Homer's Catalogue — — —. According to Strabo — — —, Diodorus — — — and Pausanias — — —, viz., according to the same authorities who record for us the conquest and destruction of Tiryns and Mycenae by the Argives, Asine was also destroyed by the Argives; who spared only the sanctuary of Apollo Pythaeus, and united the territory of the town to their own. On the Acropolis of Asine are found extraordinary masses of potsherds of that painted prehistoric kind peculiar to Mycenae and Tiryns, and which, though exposed to the open air for thousands of years, have lost little or nothing of their freshness, also very many saddle-quarries of trachyte, corn brisiers, etc., rude hammers of diorite or granite, and great masses of knives and arrow-heads of very primitive form, made of obsidian. Together with these is to be found black and red lacquered late Hellenic or Roman pottery, which points to a later settlement. In any case the fortress must have been occupied in the late Middle Ages, for in many places one sees in the walls and towers considerable repairs dating from the Venetian period».

The same opinion as to the site of the Argolic Asine is also expressed by some of Pausanias' commentators: Hitzig and Blümner,<sup>4</sup> as well as Frazer,<sup>5</sup> who furthermore, like Curtius but not without hesitation places ancient Eione on the plain of Kandia further to the east.<sup>6</sup> In »Addenda» to his commentaries, Vol. V, p. 601 ff., he furthermore supplies a description based on an autopsy of the place and a thorough account of the ruins visible at that time; these are grouped according to different building periods, and it should be noted that in the Swedish investigations his dating of the most prominent portions was found to be astonishingly correct. Frazer's observations

<sup>1</sup> Conrad Bursian, *Geographie von Griechenland* II, Leipzig 1868, p. 60 f.

<sup>2</sup> Henry Schliemann, *Tiryns*, London 1886, p. 48 ff.

<sup>3</sup> Schliemann here refers the reader to his map of Argolis, where the place is marked.

<sup>4</sup> In *Des Pausanias Beschreibung von Griechenland*, publ. by H. Hitzig, I: 2 Leipzig 1899, p. 651 f.

<sup>5</sup> The edition already quoted, III, p. 299.

<sup>6</sup> As regards the position of Eione, see however, A. Frickenhaus and W. Müller, in *Ath. Mitt.* XXXVI, p. 26.



at Asine are, briefly stated, of such a value that they are very well worth rendering in toto; in the later pages of this work it will be necessary to refer to them again:

•I visited from Nauplia 9th December 1895, and will describe the ancient remains from my notes.

The ruins of Asine occupy a peninsula or headland which rises into a rocky pinnacle on its northern or landward side, just above the isthmus which unites it to the land. The bay into which the headland projects is spacious and possesses a fine shelving beach of sand and pebbles. A level maritime plain, occupied by cornfields and olives, borders on the bay to the east and north-east of the peninsula. On the other hand the peninsula itself is for the most part a mass of rugged rocks which on the east and west descend in precipices into the sea. But at the north-western foot of the cape, below a line of high precipitous rocks, there is a stretch of comparatively level ground<sup>1</sup> and again on the eastern side of the peninsula, above the rocks, there are some terraces of earth. On these more level parts the ancient town probably stood, but it can never have been a large one. In regard to its defences, the peninsula is protected on the east and west by sea-cliffs which might seem to render fortifications unnecessary; and on the west side there appears in fact to have been no wall except in a narrow opening between the cliffs through which a steep slope leads down to the water's edge.<sup>2</sup> At its southern extremity, on the other hand, towards the open sea the promontory slopes more gradually and a rugged path here leads down through the rocks to the water. On this side accordingly, a fortification-wall, of which there are remains, crossed the peninsula from west to east<sup>3</sup> at the head of the slope, and it was continued round the angle on the east side, where there are also remains of it. It may very well have been continued all along the eastern face of the peninsula, above the sea-cliffs, though beyond a certain point it has now disappeared. On the landward or northern side of the headland there is also a line of high rocks which contributes to the natural strength of the place, and this natural defence was further strengthened by a fortification-wall running along the top of the rocks. The points at which Asine was most easily accessible and therefore weakest were at the north-eastern and north-western foot of the rocky peninsula, above the shore of the bay. Both these places were accordingly protected by fortifications, of which remains exist.

The fortifications of Asine seem clearly to belong to three different periods, the Mycenaean, the Greek, and the Venetian. (1) Of the Mycenaean walls the remains are but scanty. To affirm, as Schliemann did, that they are better preserved than the walls of Tiryns is a most monstrous exaggeration. Such as they are, they are best seen in the wall which crosses the peninsula from east to west<sup>4</sup> on its southern or seaward side. Parts of this wall are built in true Cyclopean or Mycenaean fashion of great blocks of stone hardly fitted together; one block is 2 metres long and 1 metre high, another is 2 metres long and 1.85 metre high. Further, at the eastern end of the wall, where it has turned the angle and begun to follow the eastern face of the peninsula, there is a square projecting tower built of true Cyclopean masonry<sup>5</sup>. It measures 13 paces on the front and 10 paces in the sides and supports a terrace of earth, above the surface of which the walls of the tower do not rise. The front wall of the tower, supporting the terrace, is about 3 metres high; it is built of large rough blocks scarcely hewn on the outside and only rudely fitted together. Within the tower, that is in the small terrace supported by it, there are remains of Cyclopean walls and a cavity in the ground which seems to have been a cistern. But even the southern wall of Asine, though in part Mycenaean or Cyclopean in style, is by no means exclusively so. Beginning on the western edge of the peninsula with a small square tower built of large roughly-hewn quadrangular blocks, it is preserved unbroken for about 30 paces eastward. Both faces of the wall are standing. It is 1.80 metres thick, and is standing to a height varying from 1 metre to about 2.70 metres. The stones of which it is composed are of various sizes, roughly cut in polygons and fitted together; but the masonry, though rough, seems too regular to be called Cyclopean or Mycenaean except for a few yards at the west end. The same rough polygonal, but not Cyclopean, masonry appears again in a projecting angle of the wall on the south-eastern face of the peninsula, close to the Cyclopean tower already described. The wall, where it makes this projecting angle, is 3.50 metres high. The other two places where remains of Mycenaean or Cyclopean masonry may be seen are in the gap between the cliffs on the western side of the peninsula and again in the fortification-wall at the north-western foot of the peninsula. In the former place — the gap between

<sup>1</sup> = The Lower City.

<sup>2</sup> S. of the Lower City, cf. below, p. 34.

<sup>3</sup> Better S.W.—N.E.

<sup>4</sup> Better S.W.—N.E.

<sup>5</sup> = The «Crown Prince's tower», cf. p. 33.

the cliffs — there are remains of a roughly-built wall of ill-fitting blocks some few yards long and 6 or 7 feet high. In the latter place — the fortification wall at the north-western foot of the peninsula — there is a piece of a similar rough wall under a wall of a totally different kind, namely a wall of well-jointed polygonal masonry which certainly belongs to the good Greek period.<sup>1</sup> Both these pieces of rough walls are probably, though not certainly, Mycenaean. That there was a Mycenaean settlement at Asine is proved by the abundant remains of painted Mycenaean pottery on the peninsula, especially on its south-western side. I picked up and brought away a good many small sherds which seemed to me Mycenaean.

(2) Of the fortifications belonging to the Greek or classical age there are massive remains at the north-eastern foot of the peninsula, facing eastward across the sandy beach of the bay. The remains consist of a wall built of well-cut and well-jointed polygonal blocks and strengthened with two square projecting towers, which are built to some extent in the same style though with a strong tendency to quadrangular blocks and horizontal courses.<sup>2</sup> The wall is standing to a height of from 4.50 metres to 5 metres. The more easterly of the towers is 9 metres broad and projects 7 metres from the wall. Its height may be about 8.50 metres: fourteen courses of masonry, each apparently averaging about 0.60 or 0.70 metre, are preserved. Though the tower is square, its corners are rounded. The other tower of the Greek period, further west, is partly ruinous, but its northern face is standing to a height of about 4 metres. Its style of masonry is intermediate between the polygonal and rectangular. Still further to the west are more remains of the historical Greek period. One is a piece of a square tower well built in horizontal courses, of which four are preserved, giving a height of 2.30 metres.<sup>3</sup> This tower stands on flat ground at the northern foot of the rocky peninsula. Beside it are some mediaeval ruins and a little to the west of it is a chapel of the Panagia. Another remnant of the historical Greek period is a square tower of polygonal masonry built tolerably high up on the rocky northern face of the peninsula, immediately above the battlemented Venetian wall which is a conspicuous feature of Asine on this side. The tower in question is about 5 metres square and several metres high.<sup>4</sup> On the west it abuts on high precipitous rocks. The last piece of fortification belonging to the classical Greek age which we have to notice is a wall at the north-western foot of the peninsula, just above the beach and facing west across the bay. This wall, about 30 paces long, consists at its southern end of well-jointed polygonal masonry built on the top of a rough wall which is probably Mycenaean (see above).<sup>5</sup> Here the wall is between 2 and 3 metres high. At its northern end only one course of the polygonal wall is visible above ground.

(3) A mediaeval wall, battlemented in part and built of small stones, bricks and mortar, runs along the crest of some of the high rocks on the northern and north-eastern face of the peninsula. To some extent it stands on the top of portions of the ancient Greek wall built of polygonal masonry which has been already described. This battlemented wall is no doubt a work of the Venetians.

Within the fortification-wall at the north-eastern foot of the peninsula there is a short piece of wall built of good ashlar masonry which may have formed part of the inner side of a gateway.<sup>6</sup> The place would be appropriate for a gateway as the peninsula is easily accessible on this side.

There are of course further references to Asine by later writers,<sup>7</sup> but they do not supply anything new over and above the older ones, except for a note on the probable existence of a necropolis from the Geometric period.<sup>8</sup> It was the papers by Renaudin and Persson, mentioned above, p. 9, which first made fresh and significant contributions towards the reconnoitring of the prospective field of labour of the Swedish expeditions.

<sup>1</sup> Close to the north-western tower of the Lower City, cf. p. 55.

<sup>2</sup> = The towers of the entrance, cf. p. 27.

<sup>3</sup> = The north-eastern tower of the Lower City, cf. p. 31.

<sup>4</sup> Cf. p. 31.

<sup>5</sup> Cf. p. 55.

<sup>6</sup> = The Lower City gate, cf. p. 49.

<sup>7</sup> *Ath. Mitt.* XXXVI, p. 25 and XL, p. 106 f; Tiryns I, Athén 1912, p. 113; Diedrich Fimmen, *Die kretisch-mykenische Kultur*, Leipzig und Berlin 1921, p. 13 (with some further literary references).

<sup>8</sup> Tiryns I, p. 138 and 148 (cf. below, p. 192).





Fig. 4. The Bay of Tolon; arrival of the expedition's baggage in spring of 1922.

### 3. THE FIELD OF WORK OF THE EXPEDITIONS

At the beginning of the Swedish researches therefore Asine was fairly well located to the place, about 8 km S.E. of the present Nauplia and about 1.5 km N.E. of the fishing village of Tolon<sup>1</sup>, where a rock-crowned cliff projects into the sea, which, by reason of its imposing ruins, is known to local people as Kastraki (the citadel). One is here on the shore of the fertile valley, which 6 km farther N.W., widens out and debouches into the great plain of Argos (fig. 2—6).

The Kastraki Rock<sup>2</sup> has a length of something like 350 m (running from N. to S.) and a width of 140 m and its rocky summit is 51.9 m above sea level<sup>3</sup>; along its western side, from the northern point to the southern, ascent is practically impossible; the

<sup>1</sup> This village which formed the headquarters of the expedition has a population of chiefly Cretan origin. It was founded in the year 1840 (see Herbert Lehmann, in *Zeitschrift d. Gesellschaft f. Erdkunde zu Berlin* 1931, p. 59). But there are traces of an older settlement. In reality the harbour of Tolon, «Port Tolon», being well protected by the islands lying off the same, certainly constituted an important part of the harbour of ancient Asine. It is uncertain whether the name Tolon can also be dated so far back (cf. Curtius, above p. 17). At any rate it occurs already during the 17th century. Here, «in the harbour of Rogdi, also called Tolon», arrived, on the 30th July 1686, Francesco Morosini with a Venetian fleet, and here were landed the troops which under the command of Field Marshall Count Otto Wilhelm von Königsmarck beleaguered Nauplia, which exactly a month later finished with the surrender of the town by the Turks (see Coronelli, l. c., p. 267 ff.). Königsmarck was very likely the first-known Swede to visit Tolon.

<sup>2</sup> The rock is mainly a hard, grey, massy limestone, superimposing softer rocks (sandstone, clay shale, and lime shale) clearly visible in the west.

<sup>3</sup> The figure marked on Lehmann's map (fig. 3) is not correct.



narrow ravines, which in a few places lead up to the plateau, have been blocked by walls (fig. 15). The eastern side, on the other hand, slopes more gently down towards the sea to the S.E. and the sand dunes to the N.E., but here access to the upper parts of the rock has been made impossible, or at any rate more difficult, by an almost continuous wall, of which very considerable portions are still left. To the extreme N.N.E. lay the ascent with the entrance, flanked by two towers, of which the south-eastern and larger one — before excavation — measured about 8 m in height. The rocky mountain, fortified by nature and man, with the foundations of the buildings visible, stretches of wall, artificial terraces, some square towers, some water cisterns and other signs of settlement at various periods, constitutes Asine's citadel, the *Acropolis* (figs. 27, 28, and 40).

In the N.W., below the steep slope of the fortress hill, begins a triangular area sloping in terraces towards the N.W. each side being 150 m long; immediately below this to the N., is arable land, to the W. the sea has cut out a small cove. Both these sides have been protected by walls, the lines of which can still be partially followed, although



Fig. 5. The Kastraki Rock on the shore; view from the west, the Jakal mountain.





Fig. 6. View of the Kastraki Rock from the village of Tolon.

parts have collapsed on to the sea shore. To the N.W. where the stretches of wall form an angle, are the remains of a tower, to the N.E., below the rocky wall of the fortress, a gate opening flanked by another tower. Here, at the foot of the acropolis, lay Asine's *Lower Town*, the »Polis».

For further details, reference may be made to the earlier detailed accounts of the Asine ruins, which have been given by Schliemann, Frazer, Renaudin, and Persson who however are concerned only with the parts of the Asine area already mentioned. During the 1922 campaign it became clear that to these had to be added a very large area to the N.W. About 50 m further in this direction the ground begins to rise again towards mount *Barbouna*<sup>1</sup>, which stretches some 700 m in the same direction and has a breadth of about 600 m. Unaccessible to the S.W. it rises 91.51 m above sea-level.<sup>2</sup> Its top and the more gently slopes show considerable remnants of buildings,

<sup>1</sup> The bulk of this rock, consists of grey, hard massy limestone. Farthest in the S.W. we meet, however, strongly plicated clay shales and on the slopes towards the E. and N. soft, grainy and slaty limestone, together with a very soft serpentine conglomerate.

<sup>2</sup> From its heights, as from those of the acropolis, one gets a marvellous view across sea and land — far into the interior of the Peloponnesus in the W. and Argolis in the N. and E. (figs. 18 and 19).

terraces, and walls, and — as the investigations have shown — both Mycenaean and Geometric necropolises of Asine, as well as graves from a later period (fig. 40).

Over terraces and slopes, especially those of the acropolis and Lower Town, lie innumerable scattered potsherds, bearing witness to the intense settlement that existed here in prehistoric and even later times. Indeed, the site was inhabited even at a very late period, for the defensive possibilities of the place were recognized by the Venetians, who made it a key-fort to control their possessions in this part of Greece. The ancient walls and towers of the fortress-height and Lower Town, by then fallen into ruin, were once more put into condition and even enlarged, and embellished with picturesque turrets (fig. 30).

Now the place is again deserted, without a human habitation. The only visible building — on the site of the Lower Town — is a tiny chapel consecrated to the Virgin Mary (Panajia), with an adjacent house erected on a terrace which partly rests on the ancient city wall, the parapet being constructed of material from the same wall. On the terraces of the acropolis and Lower Town a little grain is grown, those of Mount Barbouna also produce some grain, but on its N. and E. slopes there are vineyards and plantations of olive and almond trees. The natural vegetation is scanty: hardly a tree, only bushes (»Phrygana vegetation») and grass, which supplies poor grazing for sheep and goats.<sup>1</sup>

Such was the appearance of the place where ancient Asine stood, when the Swedish excavations were begun in the spring of 1922.

<sup>1</sup> A brief description of the natural conditions of the district, based upon autopsy and showing the clear and exact observations of the natural scientist, is given by the geographer Alfred Philippson, in *Der Peloponnes*, Berlin 1891–1892, p. 58 ff. . . . »Von Chaidarion nach Tolon überschreitet man die kleine, 2 km breite, sehr fruchtbare Ebene, welche das Gebirge von Navplion von der Hauptgebirgsmasse der Argolis trennt. Sie verengt sich nach N. gegen Merze hin bis auf  $\frac{1}{2}$  km und erreicht eine Höhe von 32 m ü. d. M. Sie ist mit Getreide, Wein und Oelbäumen bestellt; bei Merze gedeihen auch Zitronen und Korinthen. Einzelne kleine Hügel aus massigem Kalk ragen aus ihr hervor, die Verbindung herstellend zwischen den Kalken von Phanari und denjenigen von Tolon. Letzterer Ort, ebenso wie die umliegenden Dörfer Iria und Kandia von kretensischen Fischern bewohnt, welche zusammen eine besondere Gemeinde (von nur 818 Seelen) bilden, liegt an der Südküste des kleinen Gebirges, dort wo sich die Felsinsel Rhodi vorlegt und einen geschützten Ankerplatz darbietet. Zunächst überschreitet man, von Chaidarion kommend, einen Höhenrücken, von bräunlichem massigem Kalk, str. N 35° W, fd. NO; auf ihm liegen die Reste der alten Stadt Asine. Unter dem Kalk folgt grüner Sandstein, Tonschiefer, bunte Kalkschiefer, stark zusammengefaltet, streichend N 60° W, fd. NNO; dann Konglomerat von Serpentergerollen; dann Tonschiefer und Sandstein. Von hier erstreckt sich bis Tolon eine kleine, steinige Küstenebene, vom Meere durch einen Dünenzug getrennt, auf welchem man seltsamerweise Wein angepflanzt hat. Das Gebirge, an welches sich die Küstenebene anlegt, besteht im unteren Teil aus Schiefer und Sandstein mit kleinen Kalkklippen-Zügen, str. NW; darüber liegt, in flache Falten gelegt, massiger Kalk, welcher den Gipfel des Schakalberges (Tschakali, 337 m) zusammensetzt. Aus demselben Kalk besteht die Insel Rhodi; sie bildet eine NW streichende Schichtmulde, deren beide Flügel als zwei parallele Bergrücken aufragen; der westliche trägt alte Befestigungen. — Von Tolon nach Merze zieht man auf einer Fahrstrasse an dem Ostfuss des Gebirges entlang; es besteht aus NW streichendem Kalk, welcher zuerst NO, dann SW fällt. Die Berge sind nur mit dürftiger Phrygana-Vegetation bedeckt. Am Fusse liegt eine Reihe von Ortschaften. Bei Tsapheraga fällt der etwa 250 m hohe H. Ilias-Berg durch seine ungemein steile nadelförmige Gestalt auf. Von SO gesehen zeigt sein Profil einen durchschnittlichen Neigungswinkel von 50° auf der Süd-, von 65°, auf der Nordseite; auf letzterer sogar local 80°! Auf dem Weitermarsche erkennt man, dass er in Wirklichkeit nicht eine Nadel, sondern eine nach NW gestreckte Kalkmauer mit ungemein steilen Seitenwänden darstellt. — Kurz vor Merze steht am Fuss des Gebirges unter dem Kalk Schiefer an. — Von Merze nach Navplion bewegt man sich durch die sehr fruchtbare Ebene. Weingärten, untergeordnet auch Korinthenpflanzungen, bedecken sie; zwischen ihnen sind zahlreiche Oelbäume gepflanzt. Am Gebirgsrande entspringen mehrere Quellen, in deren Nachbarschaft die verschiedensten Südfrüchte gedeihen. Es ist eine der lachendsten und wohlangebauteiten, aber auch der heissesten und ungesündesten Gegenden des Peloponnes.« — See also Herbert Lehmann, l. c., p. 43 ff.



# THE PROGRESS OF THE EXCAVATION AND THE OBSERVATIONS MADE

BY OTTO FRÖDIN

## A. The Acropolis

During the spring campaign of 1922 were begun, first the clearance of the area round the entrance (p. 27), and secondly the investigation of a dwelling house of the Geometric period (p. 39), a terrace, (the so-called »Polygonal Wall Terrace» (p. 44)



Fig. 7. The Hellenistic ramparts on the N.E. side of the acropolis.

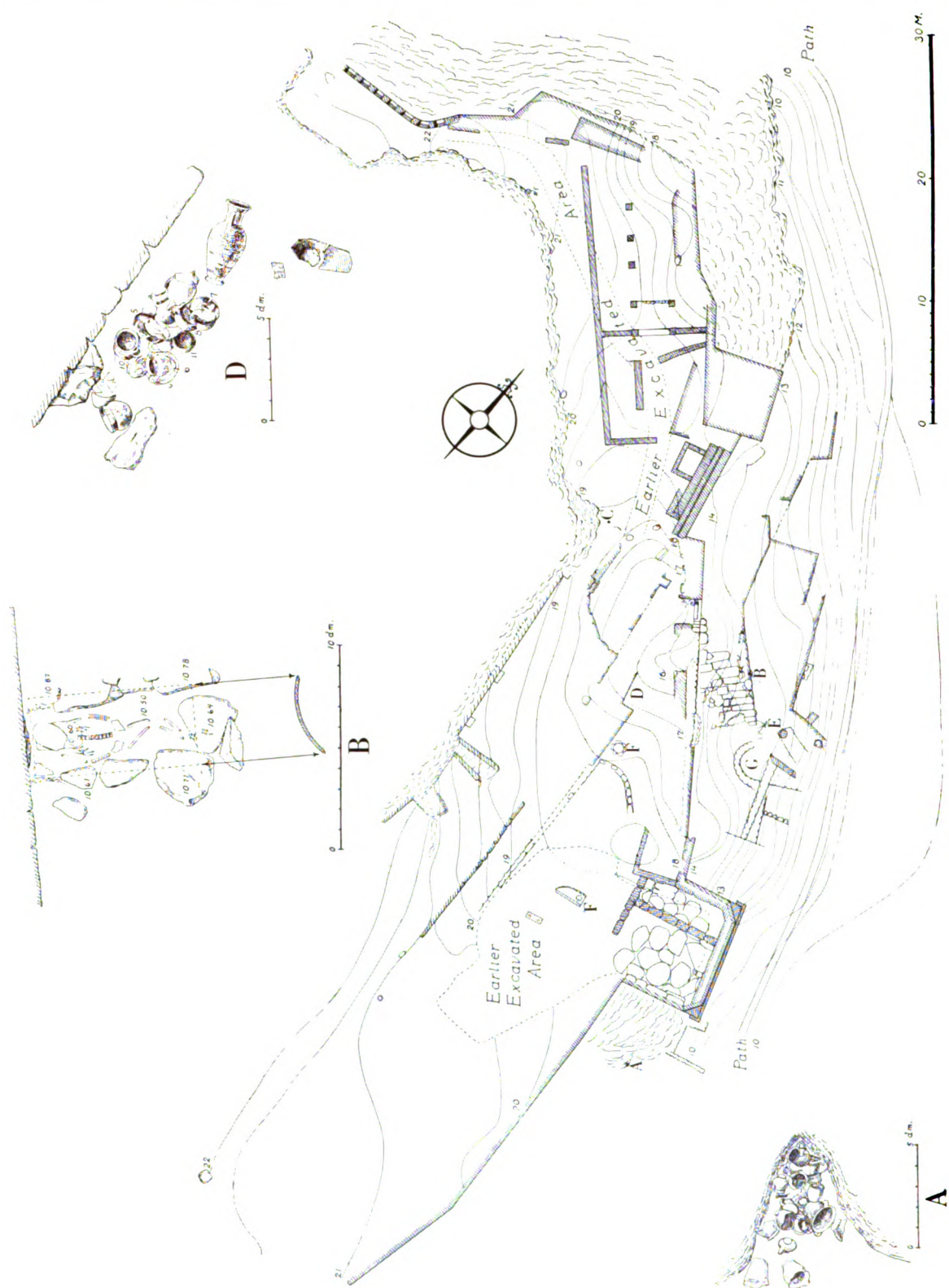


Fig. 8. Plan of the entrance to the acropolis.

and two separate dwelling houses from Hellenistic times (p. 33). The excavation of the two last-mentioned sites was completed.

Work on the others, however, continued during the autumn campaign in the same year, when, furthermore, a tower (the so-called »Crown Prince's Tower») located on the fortress-height and forming part of the wall system, was investigated (p. 33) and an excavation of a terrace (the so-called »pre-Mycenaean terrace») to the west of it begun (p. 41).

It was only on the last-mentioned site that the work was continued during the 1924 campaign, which was mainly devoted to researches into the Lower Town and the Barbouna area.

During the 1926 campaign the work on the last-mentioned terrace and also on the »Polygonal Wall Terrace» was resumed and finished, and on the entrance area, the excavation of the Geometric dwelling house already mentioned was also completed, and it was found to be superimposed on other structures. It should be emphasized here that the investigations on the acropolis were carried out chiefly in order to cheque and complete the observations, made previously by Messrs. Frazer, Renaudin, and Persson.

## 1. THE AREA ROUND THE ENTRANCE

At the very beginning of the 1922 spring campaign clearance was begun on the N.E. stretch of the acropolis' system of fortification, where there was good reason to assume that the main entry into the citadel had been,<sup>1</sup> and the work there proceeded without interruption, and was continued during the 1922 autumn campaign, and during part of the 1926 campaign. From the sides as well as from between and above the two strong towers masses of earth were removed, which had accumulated during a long sequence of centuries on the sloping cliffs through rain or other causes. Trial trenches were also dug at suitable spots.

The stately S.E. tower (figs. 9 and 10), whose southern side projects 7 m and the north-western 5.5 m, the base of which measures 10.3 m in width, stood forth, after the base had been laid bare, in all its imposing height of 9.5 m.<sup>2</sup> It is built of polygonal blocks, laid in horizontal courses, 14 in number, to which is to be added another, that formed the parapet which has now almost disappeared. Above the two base courses, which project somewhat along the front and at the front corners of the two sides, the corners are cut off and flattened, and for the first eight courses the edges of this flat strip of masonry are drafted; the four courses above these have flattened

<sup>1</sup> Cf. Renaudin, l. c., p. 300, and Persson, Bulletin 1920-1921, p. 21.

<sup>2</sup> Cf. Frazer, p. 20 above, Renaudin, l. c., p. 298 (tower A), and Persson, in Bulletin 1920-1921, p. 20.



corners, but no drafting. Another difference between the 2 sections is that each of the lower courses projects more than the courses of the upper part. The four upper ones are furthermore built of slightly darker limestone blocks than the lower ones, and this upper part of the tower as a whole projects less than the lower one. The upper plan of the tower, which is built of large slabs, is divided into two parts of unequal size by a transverse row of blocks. Finally, it should be mentioned that the tower is bonded with the walls on both sides.

Close to, and just S.E. of, this tower were found, first, remains of the foundation walls, partly covered by layers of driftsand, which obviously dated back to Hellenistic or Hellenistic-Roman times, and secondly a deposit of 24 Hellenistic vases, concealed in a small crevice in the rock (fig. 7:A).

The north-western tower, which is smaller in all its dimensions than the other, was rebuilt almost entirely at a later — probably Venetian — period.<sup>1</sup> But even here the material consists of polygonal blocks.

Between the two towers was found a strong ramp of polygonal masonry, fig. 12 (yet not with strictly horizontal courses), which constitutes a buttress for a stairway, a large part of which has been preserved (fig. 11); this stairway led up towards the N.W. to a threshold with a length of 2 m and a width of 0.5 m, at the right-hand edge of



Fig. 9. South-eastern entrance tower.

which was a pivot hole for a door; consequently this must have been the threshold of the main gate of the fortress. Of the stairway, which had a width of 3.5 m, some 15 steps, built of large and small blocks, are left; its lower portion has unfortunately

<sup>1</sup> Cf. Frazer, p. 20 above.





Fig. 10. Various kinds of masonry in the ramparts on the N.E. side of the acropolis.

been destroyed by a Roman bath — part of the hypocaust of this bath still survived. In order to get a date for the wall ramp with its stairs, a shaft was sunk close to its outer side, and this shaft was carried right down to bedrock. It was then found that in the buttress-wall foundation there were a few blocks of the soft, granular limestone, which had been used for the Roman walls of the Lower Town (p. 50). But these are situated in the lower part of the ramp, below the original surface which was marked by a flooring of stones. The visible part of the ramp, on the contrary, is, like the ramparts and towers, constructed of hard limestone a material characteristic of the Hellenistic period at Asine, to which the towers and walls of the entrance no doubt should be ascribed.<sup>1</sup> The construction of the bath shows that the stair was no more in use. The entrance and thus also the ramparts must consequently have lost their importance.<sup>2</sup> There are other facts,

<sup>1</sup> Cf. Karo, in *Ath. Mitt.* XL (1915), p. 106 f.

<sup>2</sup> Perhaps in order to reach the gate, use was then made of the narrow path, which, partly supported on small ramps, leads up from the north and which has also been cleared.



too, which indicate that quite a long time has elapsed between the Hellenistic and Roman building periods (cf. p. 100).

In close proximity to the buttress, and clearly built after its erection, there lay a Hellenistic or Roman grave, a cist (fig. 7:B), oriented N.E.—S.W. with an inside length of 0.9 m, a width of 0.3 m. The two long sides and the north-east end were built of rubble, while the wall itself formed the end at the S.W. The cover consisted of a tile 0.8 m long, 0.4 m wide, and 0.015 m thick. In the cist was found the badly preserved skeleton of a child lying stretched out on its back, the head towards the S.W., the arms slightly bent and lying along the sides, and the legs slightly bent. Under the head lay the pin of a bronze fibula, whose connection with the grave could, however, not be determined with any certainty; it belongs perhaps rather to the filling which formed the bottom layer.

A few metres straight along, inside the threshold, were found the remains of a semicircular forecourt with a diameter of about 10 m, partly cut out of the rock, whose opening faced the entrance.

To the right of this were laid bare considerable foundations of a large hall or portico with a width of 9 m and a length of at least 23 m oriented N.W.—S.E. Its south-

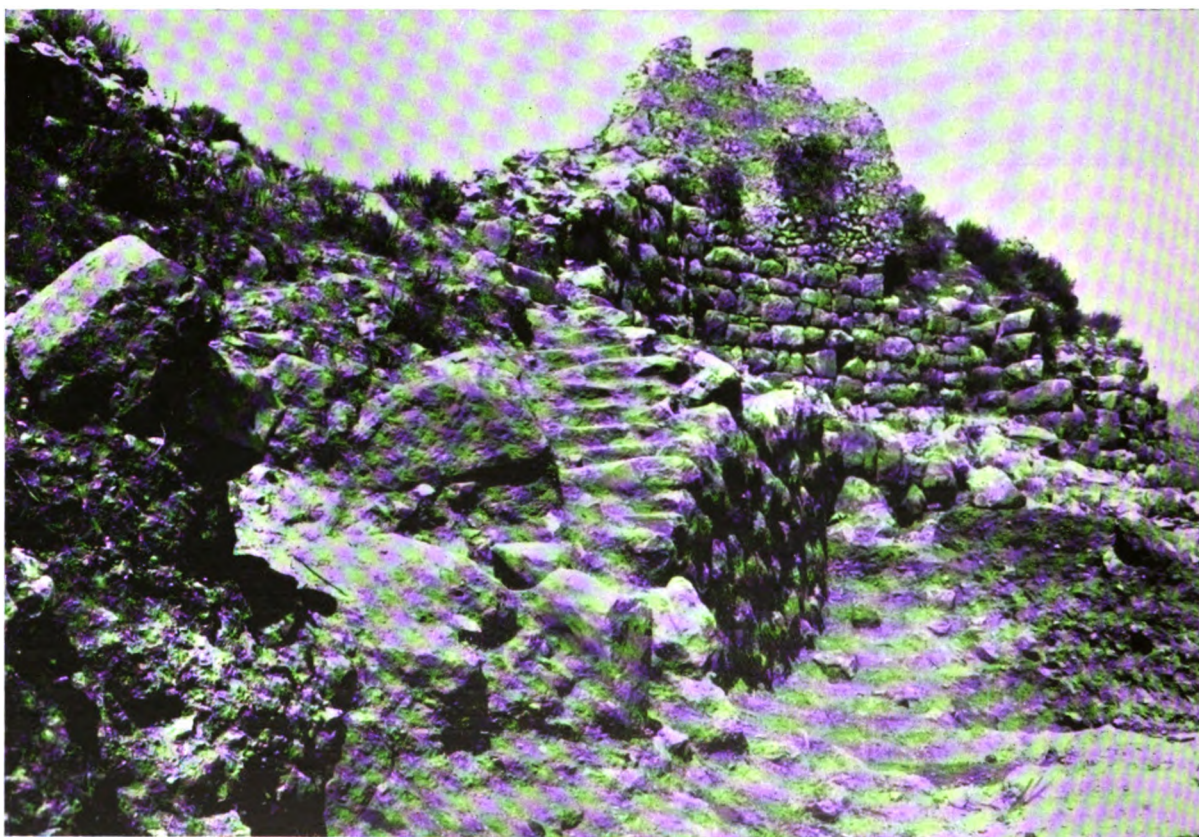


Fig. 11. Hellenistic stair leading to the acropolis.





Fig. 12. Foundation of the retaining wall of the entrance stair.

eastern portion consists of a square ante-room ( $9 \times 9$  m), from which a doorway, 2.5 m wide, led into the hall proper, of whose two rows of pillars five bases, belonging to four pairs of pillars, are more or less well preserved. Its north-western end is gone, but the length of the hall was at least 14 m. Its long north-eastern side was also destroyed when the Venetians rebuilt the fortress wall;<sup>1</sup> it had obviously been open along this side giving access to the magnificent view of the surrounding country. The hall may be dated to the Roman epoch; the building-material is, as a rule, the first-mentioned soft limestone.

To judge from appearances, the Venetians were also responsible for the tower above the hall, higher up the slope to the S.W.<sup>2</sup> (fig. 13). It is certainly built of ancient material, polygonal, hard limestone blocks,<sup>3</sup> but they were laid in mortar much of which is still preserved, and, furthermore, the walls are constructed as facingwalls with an inner filling of small stones or rubble. The tower was certainly built to protect the gate of the Lower Town beneath it (see below p. 49).

<sup>1</sup> It is possible that damage was done to the room also at a more recent period, in some excavations of which distinct traces were still visible at the beginning of the Swedish researches, both to the right and to the left inside the entrance; they were carried out by Mr. Kofiniotis some time about the turn of the century. See on this Renaudin, *l. c.*, p. 303, and Persson, in *Bulletin 1920—1921*, pp. 19 and 24. — See also p. 16.

<sup>2</sup> See Frazer, p. 20 above. Renaudin, *l. c.*, p. 299, and Persson, in *Bulletin 1920—1921*, p. 22.

<sup>3</sup> Perhaps a tower existed in the same place during Hellenistic times.



Between the hall and the semicircular forecourt in a crevice in the rock was found, a deposit of small idols and statuettes of terracotta, dating from Early Archaic times.<sup>1</sup>

Another deposit of about 20 vases dating back to Geometric times was brought to light just above the entrance (fig. 7:D) very close to a stretch of wall, and in such a position that the wall must have been built before the vessels were deposited. This dating is of importance, since this piece of wall forms part of the buttress for the road which thus, already during Geometric times, led up to the acropolis in a southerly direction from the entrance. The entrance to the citadel was consequently in the same place during the Geometric period.

From the entrance a narrow path, previously unnoticed and partly cut out of the rock (fig. 10), led up to a gap in the crest of the rock above the Lower Town. As the acropolis could — though with difficulty — be scaled here, the gap was stopped with a few blocks of stone.

At the end of the 1922 autumn campaign trial trench was made in the deep layers of deposit before the citadel wall at a point some 30 m south of the entrance. Here was found an older piece of wall in association with rich layers from both Geometric and L.H. times, lying below the deposits of the Hellenistic period. There have, however, been no opportunities for any very detailed investigation of this part of the site.

<sup>1</sup> To the same period belongs another hoard of terracotta statuettes and small votive vessels, which our foreman found in a crevice in the rock on the western slope of the acropolis, just before the beginning of the 1922 autumn campaign.



Fig. 13. Tower in the ramparts on the north side of the acropolis, just above the gate into Lower City.



## 2. THE »CROWN PRINCE'S TOWER«

About 130 m farther S.S.W., in the enceinte-wall can be seen the remains of a tower, which by reason of its strong »cyclopean« walls (fig. 14) has attracted a good deal of attention and was provisionally dated to the L. H. period.<sup>1</sup> Immediately after his



Fig. 14. The so-called »Crown prince's tower«.

arrival at Asine, in the autumn 1922, H. R. H. the Crown Prince made an investigation of the deposit on the level of the tower (fig. 8). These layers were found to be thin and poor, and the excavation unfortunately gave no appreciable results, at least, no support for the proposed dating. The tower probably belongs to the Geometric period.

## 3. FOUNDATIONS OF HELLENISTIC HOUSES

Farthest up on the slope towards the E. and about 70 m. N.N.W. of the last-mentioned tower there were investigated during the 1922 spring-campaign the remains of a Hellenistic house complex, rich in finds, which in view of the slope of the ground to the E. had been divided into six levels, dropping in terraces (fig. 16); this either one assumes that the complex constituted a continuous whole of several rooms or consisted of several separate houses.

The greatest interest offered the three upper levels, which were completely laid bare and were then found to form the foundations of a house, intended for oil or

<sup>1</sup> See Frazer, p. 19 above; Renaudin, l. c., p. 299; Persson, in Bulletin 1920—1921, p. 22.

wine pressing, oriented W.N.W.—E.S.E., and consisting of a square room in the W. with, apparently, two narrow, rectangular rooms in the E. The former, measuring inside  $2.8 \times 2.8$  m, had its western outer wall erected of polygonal, though not particularly large, blocks — thus Hellenistic masonry — as yet left standing to a height of something like 1 m. The northern and southern outer walls, which on the other

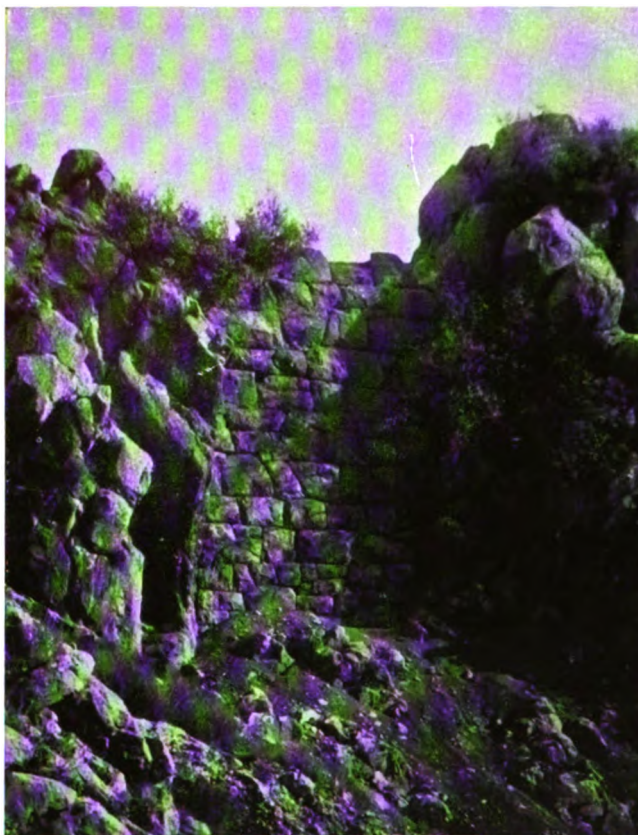


Fig. 15. Wall blocking the passage up to the west side of the acropolis; the «Polygonal Wall Terrace» is situated just above this wall.

hand had been erected of larger blocks and rubble in irregular courses, are, especially towards the E., very much destroyed. Of the eastern wall, finally, there remain only very trifling remnants; this has obviously been thinner than the first-mentioned, and formed an inner wall in whose central portion the door must have been located and opened into the nearest ante-chamber. The floor is laid with pieces of tiles, placed on edge in lime mortar and partly covered with such. Close to the southern wall is seen the place for the press, marked partly by a rounded plane of lime mortar, 0.9 m in diameter. This rises about a centimetre or so above the level of the surrounding floor. Approximately 0.8 m further, towards the W. there is a rectangular,  $0.08 \times$



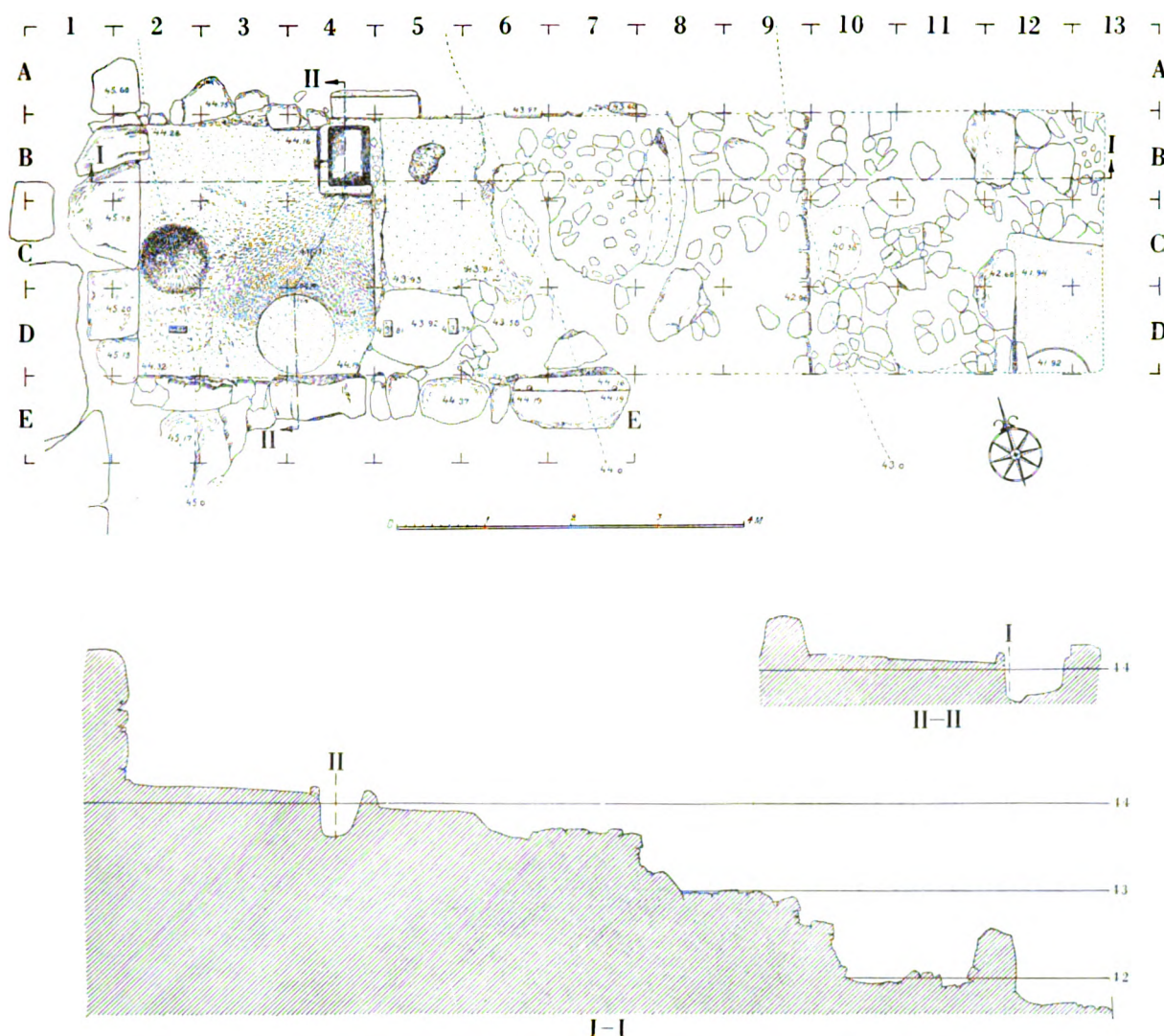


Fig. 16. Hellenistic oil- or wine press on the acropolis.

0.20 m wide and 0.13 m deep, depression in a level block lying on a level with the floor and likewise belonging to the press.

Just N. of here, close to the western wall, is noticed a bowl-shaped tank sunk in the floor, 0.75 m in diameter and 0.10 m deep, coated with lime mortar, below that rubble. In the north-eastern corner of the room is seen another tank, likewise sunk in the floor, rectangular in shape, inside  $0.5 \times 0.76$  m, and 0.5—0.55 m deep, towards the room bordered by a 0.1 m thick moulding made of ashlar placed on edge and covered with mortar, this moulding rising 0.1 m above the level of the floor. This moulding is provided with two holes pierced right through, one on each side, 6 to 7 cm in diameter, and with the lower edge on a level with the floor; as this gently slopes towards the tank, the liquid squeezed out ran by itself down into the tank.







left standing to a height of 0.45 m above the inner floor level, without any trace of a door-sill or the like. Rather there existed here direct connection — without a door — with the eastern ante-chamber, which, like the aforesaid one, was oriented N.N.E.—S.S.W. Its dimensions are  $1.9 \times 3.0$  m, and the floor is located another 0.2, m lower. In the S. one got directly out into the open air through a door, marked by a 1.35 m long door-sill, provided with two round door pivot holes or cavities for the door-posts, with a mutual distance of 0.92 m.

Whether this press-house had any connection with the rooms on the three remaining floor levels in the E., or these constituted one or more separate establishments, has, as has already been pointed out, been impossible to ascertain. At any rate, they seem to have extended farther to the N. and S. than the press-room.<sup>1</sup>

On making investigations below the building complex there were found directly below the floor strata from Geometric times,<sup>2</sup> and — below the floor in the squares C6—D6,

<sup>1</sup> On the floors of this structure were found 12 silver and bronze coins, which, to judge by a preliminary examination, date from the Achaean League. The finds as well as the polygonal masonry indicate that the building should be dated to the Hellenistic period. For a more precise dating, reference is given to Prof. Persson's forthcoming paper on the Asine coins.

<sup>2</sup> But no strata from Classic or Archaic times.



Fig. 18. Hellenistic oil- or wine press on the acropolis.





Fig. 19. The east slope of the acropolis before the excavation; in the background, the Argolic plain.

an earth-cut grave located in early Geometric strata containing skeletal remnants of a grown-up individual, placed with the head to the N.E.; no burial gifts.<sup>1</sup>

Remains of another foundation of a house from Hellenistic or Roman times were laid bare during the spring of 1922 (figs. 17 and 18). This is located about 25 m W. of the »Crown Prince's Tower«, and has long been above ground.<sup>2</sup> Here, too, are the remains of a press-room, which in its general arrangements very much resembles the one described above. Its ground-plan is rectangular (oriented N.N.E.—S.S.W.) with inside dimensions  $3.5 \times 5.5$  m. The remaining, low remnants of walls consist of pretty large, irregular blocks, laid without any distinguishing system; in the N. and W. the room is somewhat cut out of the rock. The bulk of the floor consists of the solid rock, otherwise chips of tiles and largish stones in lime mortar.

The place for the press is marked by a rather centrally located, circular disc cut out of the rock-floor, measuring 0.7 m in diameter and rising a couple of cm above the surrounding level of the floor, and in the middle provided with a rectangular cavity,  $0.14 \times 0.20$  m wide and 0.13 m deep. 0.8 m from here, close to the eastern wall, is noticed a bowl-shaped tank, 0.72 m in diameter and 0.67 m deep, partly cut out of the rock and clothed with chips of tiles and mortar; on its bottom lay a large piece of a vase. Another, similar tank exists in the south-eastern corner of the room, and this, too, is bowl-shaped, 1.0 m in diameter and 0.5 m deep, and cut out of the rock. Here, too, lay a large fragment of a vase on the bottom. The floor slopes gently down towards the two tanks.

<sup>1</sup> This tomb was found in the spring of 1926.

<sup>2</sup> See Schliemann, p. 18 above; Renaudin, l. c., p. 301 f., and Persson, Bulletin 1920—1921, p. 22 f.



## 4. THE »GEOMETRIC TERRACE«

During the 1922 spring campaign was started the investigation of a house-complex, located about 10 metres S. of the first-mentioned Hellenistic house complex (fig. 19) and this investigation went on during part of the autumn in the same year. The rich pottery

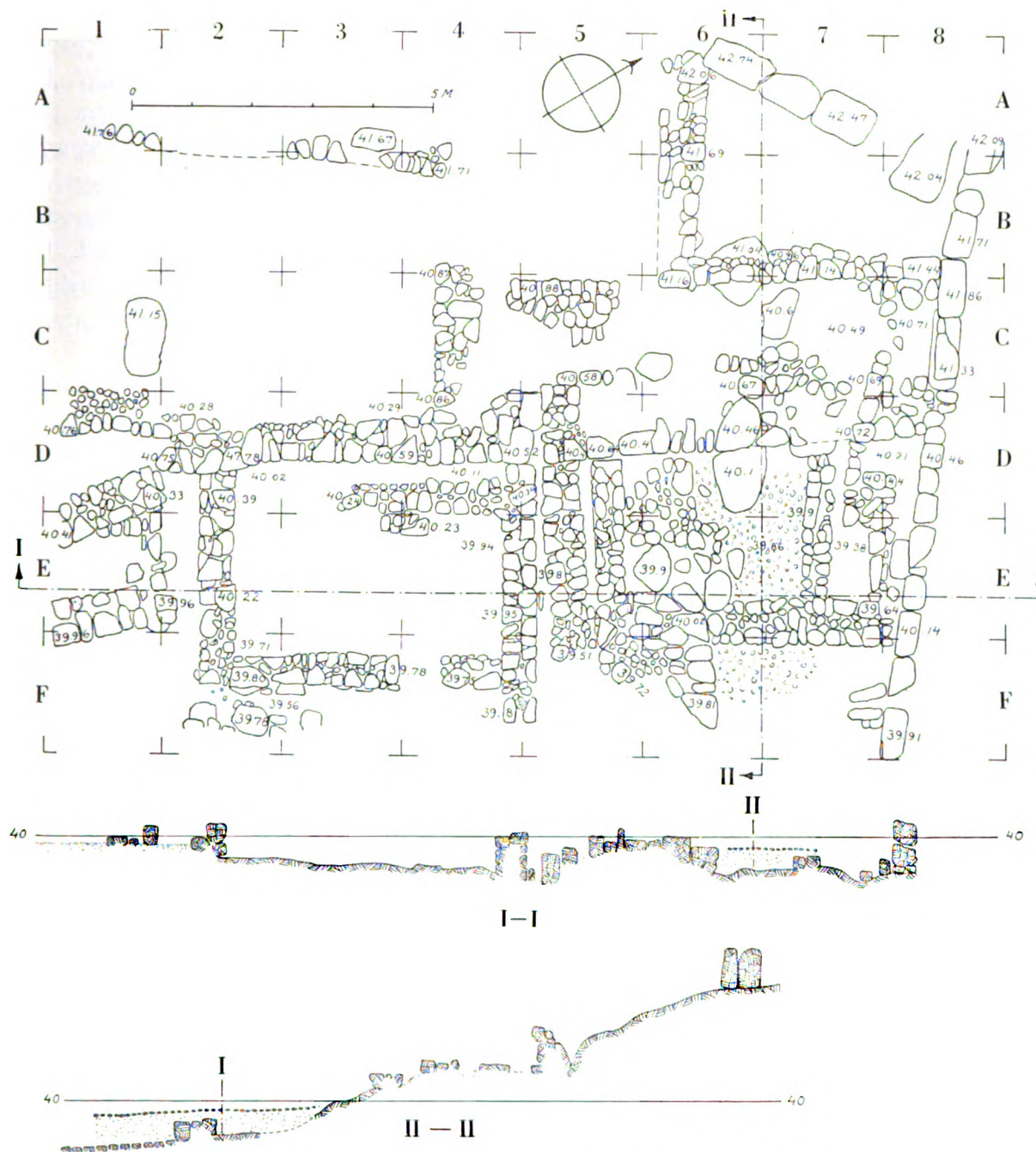


Fig. 20. Plan and section of the so-called »Geometric Terrace« on the acropolis.

material found during the same seemed to prove that the establishment dated from Geometric times, but the ultimate investigation had to remain in abeyance for the time being, and was not resumed until the campaign of 1926. It was then found that the very superficially located, and therefore very defective, Geometric establishment had been built into an older one dating from the L. H. period, which on that occasion had been seriously damaged (fig. 20).

From Geometric times dates a rectangular foundation of a house located in Squares D 2—D 4—F 2—F 4, with inside dimensions  $3.2 \times 4.5$  m and oriented N.E.—S.W. An opening in the wall on the south-eastern long side probably indicates the place for the door; possibly it is due to the damage during Hellenistic times. N.E. from here, at a distance of 1.0 m, is located a wall parallel to the north-eastern short side, which, together with a flooring located in the N.E., constitutes the remains of a similar Geometric house with the same orientation. It has been laid obliquely across the foundation to an L. H. house (Squares D 5—D 7—E 5—E 7) likewise oriented N.E.—S.W. with an (inside) length of 3.5—3.7 m and at least 2.5 m broad; of this there remain the two short ends and the south-eastern long side with a paved courtyard located outside.

In the N.W. begins a courtyard consisting of large and small stones, possibly the remains of a road pavement from Geometric times, and farther in the N.W. and W. of the places here mentioned are seen the remains of house foundations from M. H. times, perhaps some of it dating back to E. H. times, to judge from the pottery found here. S.W. of the first-mentioned Geometric house have been laid bare some walls (Squares D 1—F 1), these, too, from Geometric times, and the establishment seems to continue in this direction.

All these walls are built of rubble with a level outside, laid two or three in width. On the other hand the wall from Hellenistic or Roman times, which in the N. and N.W. (Squares A 6—A 8—F 8) transects the establishment and in that direction had to delimit the area of exploration, consists of more than metre-sized blocks, partly laid in mortar.

In its western part have also been discovered a couple of tombs. In the spring of 1922 was found in Squares C 3—C 4 an earth-cut grave, containing a very fragmentary skeleton, placed slightly on its right side in a very much contracted position, with the head to the N. Immediately S. of the skeleton lay two vases, a dagger blade of silver-plated bronze, and an arrow-head of obsidian. In the grave were noticed remnants of charcoal and ash. The other grave, which was found in the spring of 1926 in Square C 5, consisted of a cist built of rubble, oriented E.N.E.—W.S.W., and containing a skeleton lying with its head towards the W.S.W. Only half the cist and the very fragmentary skeleton were left; the cover slabs were missing. No burial gifts were found. The grave was located in E. H. strata and might very likely be dated to the M. H. period. As regards the finds in this locality, see below.

## 5. THE ›PRE-MYCENAEAN TERRACE‹

W. of the ›Crown Prince's Tower‹ and immediately S.S.W. of the press-house located there (see above p. 33) begins a partly artificial terrace, whose built up, outer (western) part and its buttress had at some period slipped down the precipitous slopes of the acropolis towards the W.

Excavations, begun in the autumn of 1922, continued during the year 1924, and concluded in 1926, in this area revealed deposits, some 1 m deep, from E. H.—M. H. and L. H. times and also from Geometric and Hellenistic times — of which, however, the E. H. and Hellenistic layers are decidedly the most conspicuous—containing, besides a wealth of pottery material, house foundations of the different periods, the oldest belonging to E. H. times (fig. 21).

Connected with these house foundations are two cisterns. One, found below the remnants of a wall in the S. E. has a rounded shape and a depth of 4.2 m. The other, located within the square room in the N. E. is cut out of the rock right to a depth

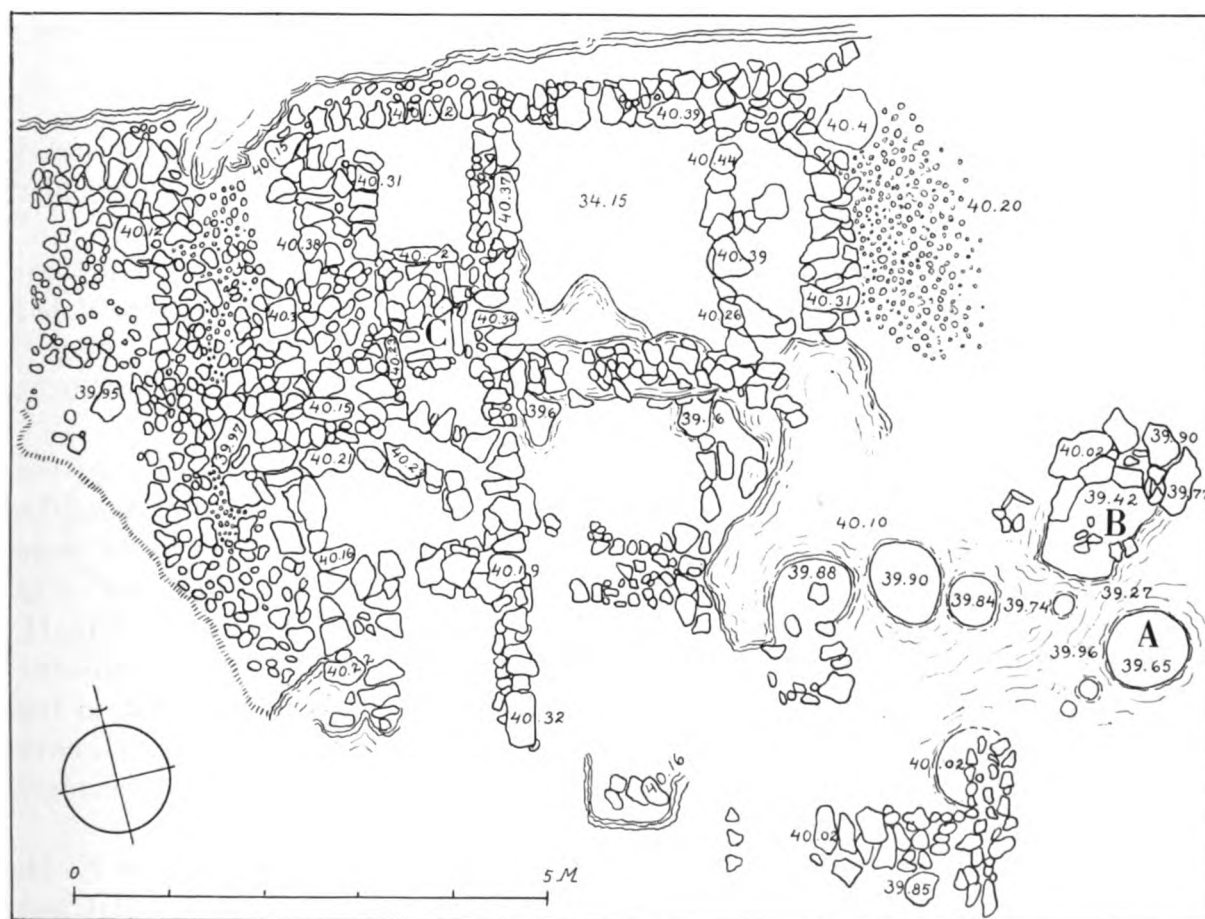


Fig. 21. Plan of the so-called ›pre-Mycenaean Terrace‹ on the acropolis.





Fig. 22. M.H. cist-tomb on the «pre-Mycenaean Terrace.»

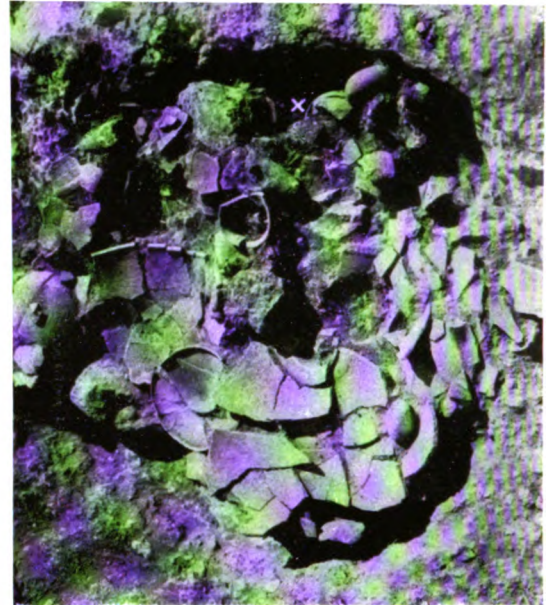


Fig. 23. Finds in situ in an E.H. bothros on the «pre-Mycenaean Terrace.»

of 6.3 m. It has been filled in during Hellenistic times; for Hellenistic pottery occurred plentifully in the filling, right down to the bottom, whereas only some sporadic older sherds and none from a later period occur.

In the same area, E. and S. E. of the house foundations, moreover some bothroi came to light. The largest of these bothroi (figs 21: A and 23), which can be dated with certainty to the E. H. period, has a diameter of 0.8—0.9 m and contained, besides a large quantity of vase fragments, also a pendant (or amulet) of steatite, a fire-dog made of poorly fired clay, etc.

N. of here, at a distance of 0.5 m, was found in the spring of 1926 a shaft-tomb from E. H. times (fig. 21: B), 0.5 m deep, cut out of the rock, square in shape, about 0.9 m square, and partly set about with stones. The cover was missing now. In the same lay the very much disintegrated remnants of a child's skeleton, with the head — as it seemed — towards the N. W. Immediately S. of the skeleton were found 3 E. H. bowls, and below one of them 3 chips of obsidian (see below p. 338 f.). This tomb is the only certain E. H. tomb that has so far been laid bare at Asine. Close to it, in the W. 3 E. H. bowls had already been found in the spring of 1924, and these, too, have been considered as dating from an E. H. tomb (see below p. 340). No skeletal remnants whatsoever could be noticed.

The tomb which in the spring of 1924 was brought to light amongst the E. H. house foundations in the N.W. dates in all probability from M. H. times (figs. 21: C and 22). It is a rectangular cist, oriented N.—S., inside 1.0 m long and 0.65—0.70 m broad,



Fig. 24. Plan and section of the "Polygonal Wall Terrace".



## 6. THE »POLYGONAL WALL TERRACE«

Some 20 m farther to the S.W. another terrace is situated, which had been the subject of investigation during the spring and autumn of 1922, but this investigation was concluded during the 1926 campaign (figs. 24 and 25). It was then found that it had at some time or other met with the same fate as the terrace just dealt with. Its artificially constructed western end, together with its buttress had slipped down the precipice to the W. In this case, however, a new buttress of polygonal masonry had been built in Hellenistic times (fig. 15)<sup>1</sup> and the terrace was once more inhabited. On the south-east of the terrace, excavation has brought to light the remains of an older settlement, part of a house complex of E. H. date (whose western part accompanied the aforesaid one that caved in) and accumulated deep layers of deposit, of which considerable strata (some attaining a depth of about 1.5 m) have been found to date back to E. H. times.

On this terrace, too, graves were found: two cist-tombs, dug out of the lime floor of the E. H. house. One of these (fig. 26, Square D 4) which is oriented N.N.E.—S.S.W., rectangular in shape, is built of four vertical stone slabs set on edge, measures  $0.3 \times 0.7$  m internally. It had no cover. On the floor, which consisted of a layer of small, water-worn pebbles, some 0.25 m below the edges of the slabs, were found the remains of the skeleton of an infant, laid with the head to the N. and the legs slightly contracted.

<sup>1</sup> Cf. Renaudin, l. c., p. 301, and Persson, Bulletin 1920—1921, p. 22.



Fig. 25. House foundations on the »Polygonal Wall Terrace«.



Fig. 26. Cist-tomb on the »Polygonal Wall Terrace«.





Fig. 27. View of the acropolis hill with the Lower City (before excavation) from Mt Barbouna; cf. fig. 39.

No other objects were found in the tomb. The other cist, which had been almost destroyed before discovery, seems to have been of approximately the same size (Square D 5). Both belong in all probability to M. H. times.

## B. The Lower Town

During the 1922 spring campaign an examination of a large water cistern of Hellenistic or Roman date was begun (p. 113), and a deep shaft was sunk directly inside the city wall, just W. of the gate tower to the N.E. (p. 49).

These two tasks were concluded during the autumn campaign of the same year. In order, however, to obtain in the more central parts of the Lower Town a section through the clearly important layers of deposit, which were likely to be concealed below the surface of the ground, a rectangular trench, measuring 2×4 m and

oriented N.W.—S.E., was opened up already during the spring campaign, about 40 m S.W. of the chapel. The digging, which was continued in the autumn of the same year was carved out in layers of 20 cm at a time, and it was not until a depth of 3 m had been attained that the bottom of the deposit was reached on solid rock. In the sifting of the soil there were found, besides animal bones, etc., a great quantity of potsherds; an examination of these showed that Roman, Hellenistic, Geometric, and pre-Mycenaean potsherds occurred mixed together even on a depth of more than 2 m, though the first preponderated in the upper layers, and the last in ever increasing quantities towards the bottom. In the layers between 2.6 and 3 m, however, only E.H. and M.H. potsherds were found, giving conclusive evidence that the place was already inhabited in pre-Mycenaean times. Some rather big stones were found with the deposit but not, however, such as to indicate the existence of building foundations.

In the pre-Mycenaean layers in the trench a couple of children's graves were brought to light. One of them was found in the southern part of the trench at a depth of 2.9 m, and consisted of a large, painted pithos (Colour-Pl. I), the other — a simple earth-burial (p. 116) — was about 0.7 m farther N., close to the N.E. wall of the trench.

The results made it necessary to enlarge the trench to the S.E., S.W., and N.W., so as to cover an area 12 m square, and there work was carried on during the whole 1924 campaign. The excavation was still carried out in strata, now of 10 cm. It was then found that, below a whole system of masonry and other structures, belonging to the settlement which had obviously existed during Hellenistic and Roman times (p. 65), there were layers with pottery and other objects from Geometric and L.H. times. Below these, again, came remarkably rich deposits from M.H.- and E.H. times, and a new system of house-walls, of M.H. date, was exposed, at an average depth of 1.5 to 2 m (p. 59).

These appeared to belong to two or three structures closely crowded together, none of which however, owing to the extent of the excavation at that time was fully cleared, and considerable parts of them were still unexcavated.

At different places and at different depths within this area were found 16 graves, most of which had been much disturbed. They consisted of pithos-graves, cist-graves or mostly quite simple earth graves (p. 115). The most interesting was a cist-grave, found in the south-eastern wall of the trench.

The results obtained were of such great interest that the 1926 campaign was mainly concentrated on a thorough investigation of the Lower Town. A large part of the city wall was laid bare (p. 59). A trench, measuring  $3 \times 3$  m, was dug directly outside it just W. of the north-eastern tower; here every layer contained mixed pottery (Roman, Hellenistic, Geometric, L.H., and M.H.) down to a depth of 0.3 m above virgin soil, where a pure E.H. deposit began. Another trial trench, also measuring  $3 \times 3$  m, was sunk inside the city wall, about 20 m E. of the chapel; in this were found deposit and house remains from different periods. The earliest period represented was the



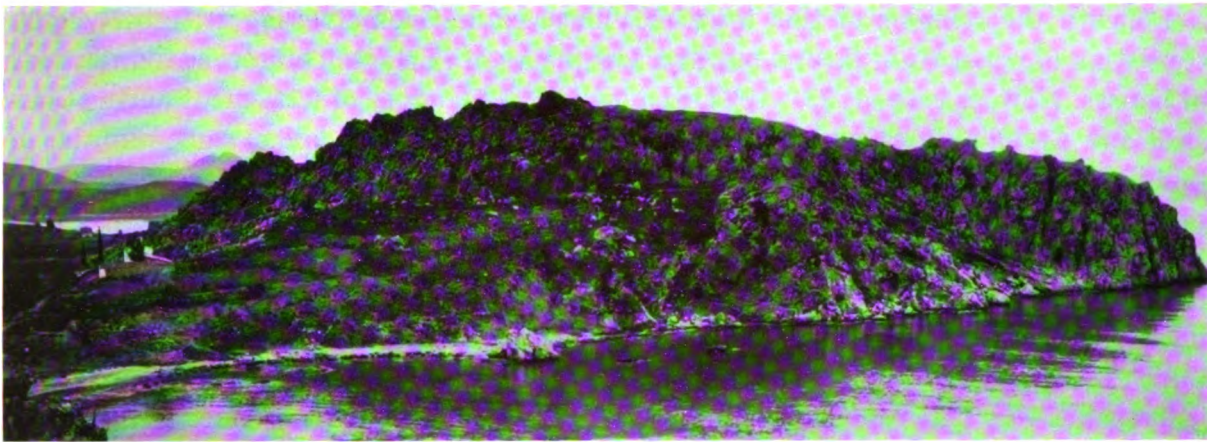


Fig. 28. The Kastraki Rock from the west.

M.H. in the last layer above the rock, which was reached at a depth of 4.45 m (p. 57).

In order to get a necessary impression of the centres of the Lower Town a long trench, stretching in a S.E.—N.W. direction from the foot of the acropolis to the corner tower of the wall to the N.W. (figs. 40 and 77), was dug at the beginning of the campaign. This trench had a width of 2 m and a length of about 125 m, and joined the north-eastern side of the 1922—1924 excavation area.

Gradually as the deep deposit was cut through the first coherent impression of buried Asine took shape, and this proved to be of such great interest that an enlargement of the trench was found necessary, first along a portion of its upper (southern) part, and secondly along its whole lower (northern) section. Finally, some 2 500 square m of the Lower Town — representing its most profitable portions — was being dug layer by layer, in places right down to the virgin soil or bedrock (figs. 40, and 42—44).

The results of this excavation are given in detail below (p. 59); the architectural remains are dealt with by Dr. Alfred Westholm, who acquired a thorough knowledge of the settlement of the Lower Town as draughtsman with the 1926 expedition, and who later — as collaborator in the Swedish Cyprus Expedition in the years 1927—1931 — thoroughly studied similar settlements in Cyprus.

These results could be briefly summarized in the following way:

Directly below the surface stratum were laid bare the remains of the Hellenistic and Roman Asine, with its streets and houses. In order to give access to the far more important and significant layers, beneath, these in themselves by no means uninteresting settlements had to disappear. An exception was, however, made for the in part remarkably well preserved Roman bath, excavated in the eastern part of the area<sup>1</sup>.

<sup>1</sup> Described (p. 105) by Dr. Holger Arbman, who was mainly responsible for its investigation.

Beneath the remains of this town or village came Geometric layers, mostly only consisting of occupation layers, but in a few places of fairly well preserved foundations of houses. Now, as in the 1922—1924 excavations, the absence of settlement during Classical and Archaic times could be proved. Below the Geometric layers came remains of buildings from the Mycenaean period, which were of all the greater interest, because previously almost every trace of such had been lacking — all the more inexplicable, because the Mycenaean necropolis<sup>2</sup> on the Mt Barbouna made it necessary to assume the existence of a fairly large settlement. Now — particularly in the northern (lower) part of the Lower Town — large Mycenaean building complexes were brought to light, belonging to three different building periods.

Trenches dug between these foundations made it clear that they concealed beneath them no less fruitful layers from still older times, but the buildings made further excavation impossible. In the upper parts of the Lower Town, on the other hand, there were no such obstacles. Here large parts of the pre-Mycenaean town were laid bare, extensive foundations of houses from M.H., and even two buildings from E.H. times.

In the different strata, between, below, and above the house-walls, were found a large number of graves (about 150), representing widely different funeral rites and periods: pre-Mycenaean, Mycenaean, Geometric, Hellenistic, Roman, maybe even early-Christian (p. 115).

During the 1930 campaign some supplementary and final researches were made into this area, especially in the southern part. In the course of these some more graves were brought to light (p. 59). To the N. a trial trench was dug; the Mycenaean layer was penetrated and below it were found first M.H. and then E.H. layers, the latter resting directly on the rock, which was reached at a depth of 4.5 m. Some remains of buildings, as well as some graves, were then found at different levels.

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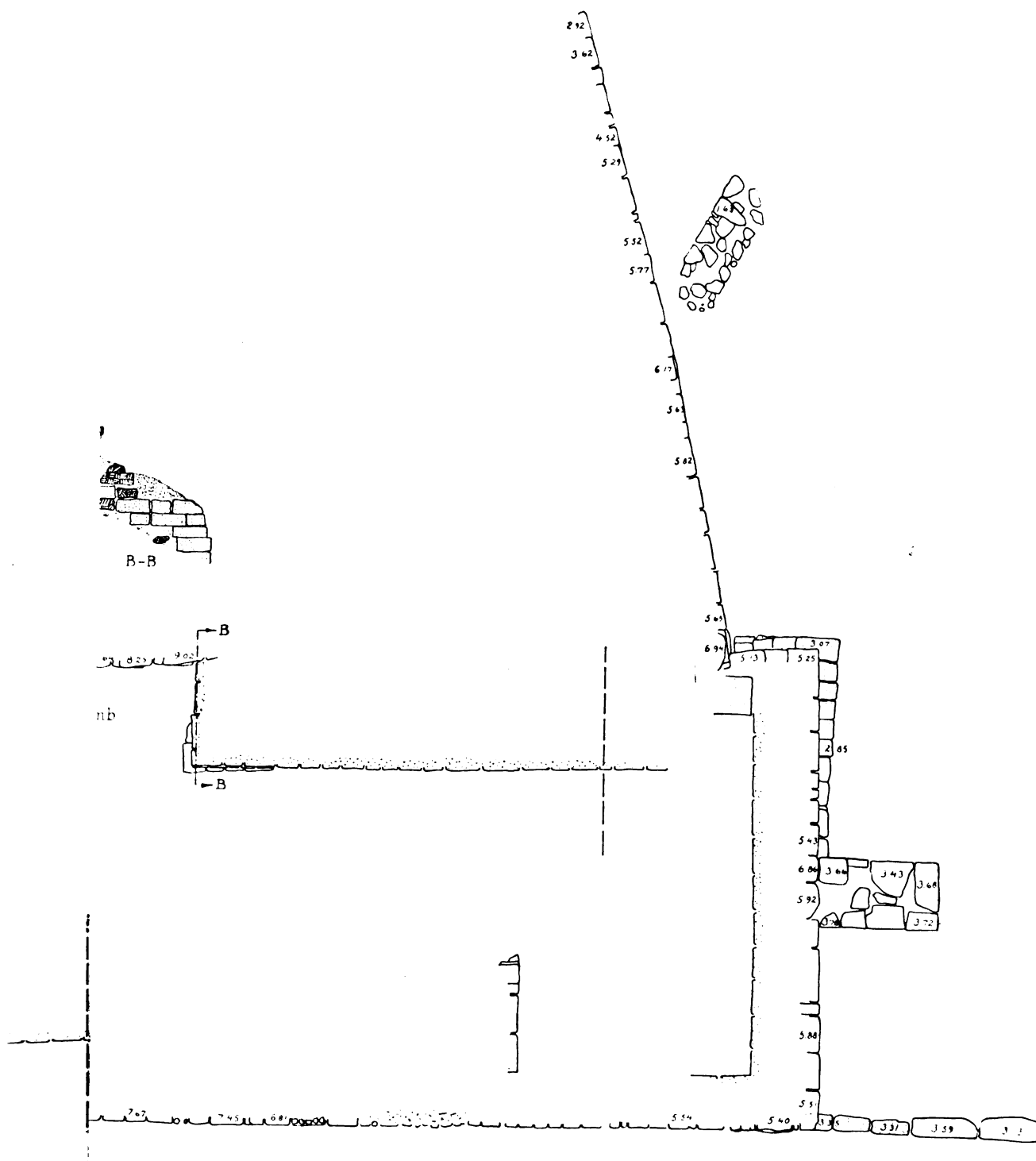
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## 1. THE CITY WALL

To the N.W. and S.W., the Lower Town was surrounded by walls (fig. 29), with a total, considerable length of about 300 m. Considerable remains of it still survive, especially in the N. (fig. 34) They were laid bare — chiefly from the outside — during the 1926 and 1930 campaigns, and were then found, at least for the most part, to have been built during the Hellenistic period, but had undergone alterations and improvements during Roman and Venetian times. No very considerable remains of older city walls could thus be ascertained (cf. below, p. 59).

<sup>2</sup> Necropolis I; necropolis II was not found until the spring of 1926.





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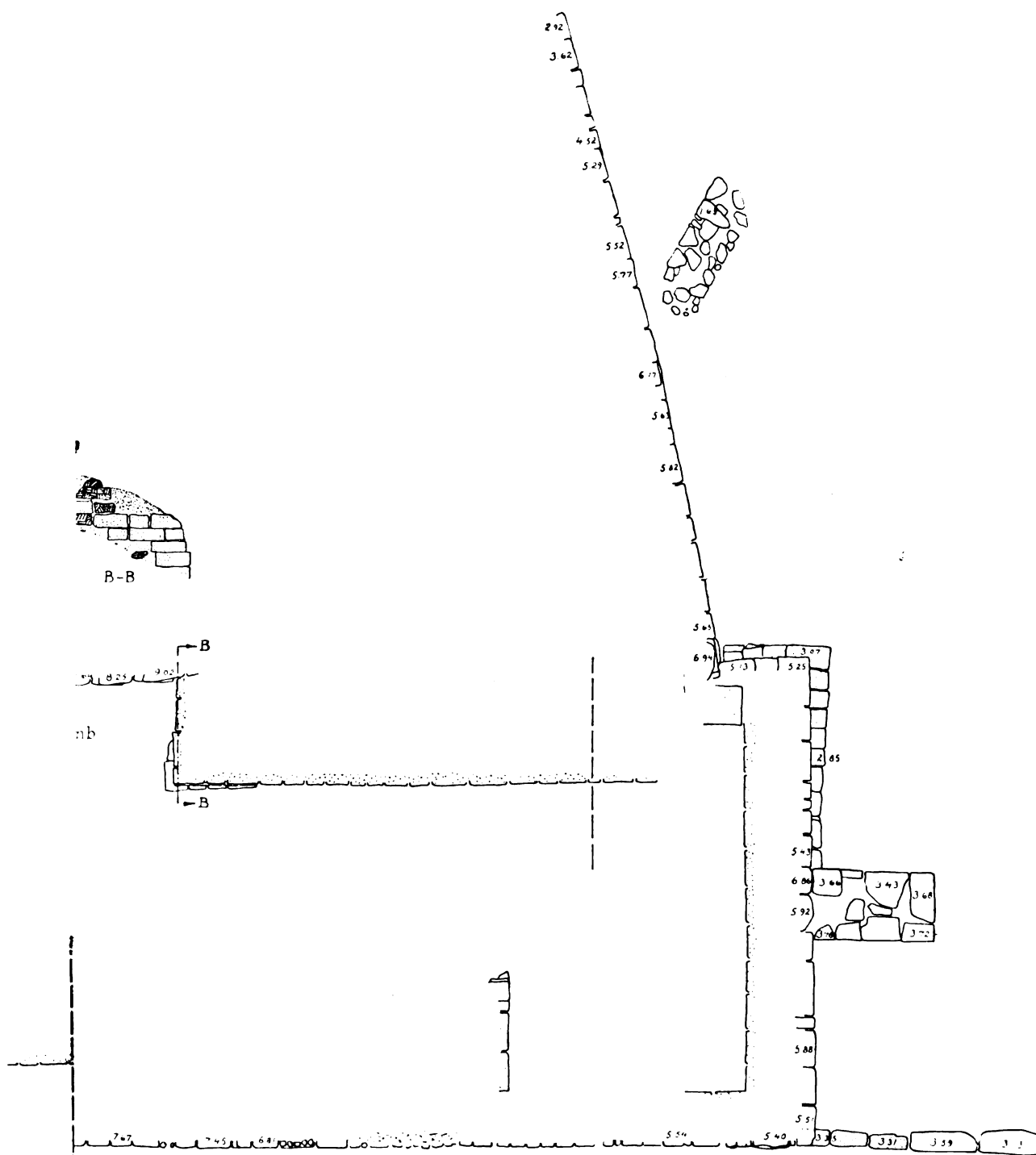
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<sup>1</sup> Cf. Frazer, p.  
<sup>2</sup> On the south  
<sup>3</sup> Cf. Frazer, p.



Where the wall meets the rock to the N.E., was situated the city gate (figs. 29, 31, and 32), the only entrance into the Lower Town.<sup>1</sup> It has a width of about 3.45 m and a depth of 3.0 to 3.1 m and faces N.E. The sides of the gate-house now have a height of about 1.85 m (above the threshold); the walls are built of well-hewn, rectangular limestone blocks, which distinctly — to judge from the stocket holes, etc. visible in several places — had originally been meant for some other purpose and had been brought from elsewhere. This structure, probably of Roman date, was crowned in Venetian times by rubble masonry and bricks, laid in mortar.

The threshold consists of a single block, 2.15 m long and 0.40 m wide, with a hole (0.10 m × 0.10 m for a bolt?) in it, some 0.25 m from the N.W. end. At either side of the threshold lies partly beneath the gate posts, a block with a pivot hole for a door (diameter about 0.15 m); the gate was consequently closed by two doors.

From the inside of the gate-house a stairway of dressed stone leads up to the right; five steps, 1.7—2.0 m wide and 0.19—0.23 m in height, have been cleared. Outside the gate the ground slopes fairly steeply; here a pavement of cobble-stones, 2.10—2.40 m wide, came to light; this has a length of 4.35—5.60 m and a gradient of 1.20 m as it runs up to and stops close to the threshold of the gate.

Already during the Hellenistic period the gateway was here in the same place, for it is flanked on the north-western side<sup>2</sup> by a tower of polygonal masonry (of hard limestone); it has a breadth of 6.10—6.20 m, projects about 4.50 m towards the N.E.; now the height is approximately 3.5 m.<sup>3</sup>

In the spring and autumn of 1922 before the tower had been cleared, trials were made in its interior, western part, for it seemed as if there might be a collapsed tholos-tomb there. Instead there turned up the remains of a lime-kiln (fig. 29) of late (Venetian?) date with a diameter of 4.5 m, built of blocks of soft limestone, taken from the nearby part of the city wall. At a depth of 1.5 m a layer, 0.5—0.6 m thick, of burnt lime, slag, ash, charcoal, and soot in separate courses made its appearance, but below this lay deposit up to 1.2 m thick, the Lower Town's occupation layer, whose deeper strata were found to contain almost nothing but potsherds of M.H. and E.H. date; here also was found a drill core for a stone axe. Below was only virgin soil, hard, reddish sand, mixed with stone and clay.

The city wall starting from the north-western side of the gate tower joined to it some 2.6 m from its outward projection, runs first for a distance of 21.2 m and is built of more or less regular blocks of mostly soft limestone. Of the exterior facade only one or two courses survive, but in the core the height rises a couple of metres. There is also, to the extreme west, a small, vertical wall (about 1.75 m long) built partly of rubble, which probably belongs to a later period.

<sup>1</sup> Cf. Frazer, p. 20 above.

<sup>2</sup> On the south side the gate was protected by a tower on the acropolis rock (p. 31).

<sup>3</sup> Cf. Frazer, p. 20 above.



Fig. 30. Remains of the Venetian ramparts; in the foreground, the gate into the Lower City (before excavation).

Here, there is a tower, 5.4 m wide with an outward projection of 2 m, faced with hard limestone blocks, more or less rectangular in shape; inside it is a filling of similar blocks of soft limestone. Of the facing blocks of the front of the tower merely one or two courses remain; on the west side, however, which has a length of 5.0 m, it rises for a few further courses towards the wall corner where — without bonding in — a fresh piece of the wall begins.

This stretch, which has a length of 12.9 m, consists of polygonal masonry of hard limestone; at the ends it still rises to a height of 2.5 m, while the central portion has suffered greater destruction. The lowest course projects some 10 cm as a kind of socle-course. During the excavation close to the wall and at a distance of about 3.5 m from its western end, were found the remains of a cist-grave (fig. 29), probably of M.H. date (partly destroyed when the wall was built). Of the cist, which had clearly been rectangular and oriented N.—S., only the northern part remained, end-slab 0.50 m long and 0.12 m thick, nearest slabs of long-sides,  $0.45\text{ m} \times 0.15\text{ m}$  and  $0.55\text{ m} \times 0.12\text{ m}$ . In the grave were found only the scanty remains of a skeleton, and below these traces of a floor of coarse gravel. In the clearing of the wall some fragments of vases

were found, dating from various periods, E.H. to Venetian; inter alia may be mentioned the mouth of a large Hellenistic (?) pithos, lying very close to the wall. The finding of a glazed Venetian (?) potsherd, lying at a height of 0.2 m above the socle-course, goes to prove that the wall had been, or become, exposed at least to this level in comparatively recent times. During a still later period the numerous blocks from the upper parts of the wall must have fallen or been moved in the places where they now lie, outside the wall. In such circumstances it may be impossible to fix a date with any certainty for the also otherwise rather incomprehensible rows of limestone blocks, 9.5 m long, obviously built from the material taken from the nearest parts of the city wall (mostly soft, but also hard limestone), which curves round obliquely to join the wall from the tower mentioned above.

The next stretch of wall — unbonded with the former piece — turns outwards for 2.8 m (figs. 29 and 33), and then continues in the original direction for a length of about 35.5 m. It is built of more or less regular blocks of soft limestone in horizontal courses. The present height varies a great deal, but only exceptionally reaches a height of 4 m. Along a piece of the wall, at the west end, the two lowest courses project in steps (each 0.10 m), and thus form a kind of base; to the E., this base is confined only to



Fig. 31. The gate into the Lower City from the S.E.





Fig. 32. The pavement of the gate into the Lower City.



Fig. 33. Joint between two parts, Hellenistic (left) and Roman? (right), of the ramparts on the north side of the Lower City.

the lowest course. In some places the masonry has been repaired with rubble and bricks laid in mortar, obviously during Venetian times.

After a projection of 1.75 m the wall, unbonded with the other, continues 27.10 m. The height varies and may reach over 4 m. The material is almost without exception polygonal blocks of hard limestone; to the W., for a length of 8 m, the stones however are smaller and of a more irregular shape. This masonry differs to a striking degree from the polygonal masonry in other parts of the city wall, and was clearly rebuilt at a later, probably Venetian, period. To a still later period must clearly belong the small, room-like structure, which was found in the angle between the walls, formed by the projecting part already mentioned. Its inner dimensions are  $1 \times 1$  m. The E., N., and W. walls are built of larger and smaller stones and are unbonded with the city wall, which forms the south wall of the room.

Clearly Venetian in date is the next, most westerly, piece of the northern section of the city wall, which — partly bonded in — turns at first obliquely outwards for 1.15 m and then, runs for a length of 10.35 m with a height of a couple of metres, ending in a tower. The masonry consists of blocks of hard and soft limestone, and bricks laid in mortar.





Fig. 34. Northern ramparts of the Lower City.



Fig. 35. Western facade of the north-west tower in the ramparts of the Lower City.



Fig. 36. Detail of the western ramparts of the Lower City, close to the tower.

This last tower, the N.W. tower of the city wall (fig. 35), built where the wall projects towards the N.W., has a rectangular ground-plan with its axis N.—S., measuring  $11.9 \times 9.2$  m. On the south side it is set forward from, and thus flanks, the western portion of the city wall; the northern end is in alignment with the adjacent piece of the wall's northern portion. This part, however, as has just been pointed out, was built during Venetian times; during Hellenistic and Roman times the wall was probably set at least 2 m further back, so that the tower could flank the wall even on this side. Its walls, which are left standing for a height of fully 2 m, have a thickness of about 1.3—1.7 m and consist externally of typical Hellenistic polygonal masonry of hard limestone; to the S. this rests on a 0.3—0.5 m projecting base two courses high, built partly of hard, and partly of soft limestone. On the inside, again, the walls — in so far as the inside of the tower has been excavated — are lined with horizontal courses of more or less regular blocks of soft limestone. From its north-western corner and approximately in line with the northern end there projects a row, 5.5 m long, of five blocks some of hard and some of soft limestone; the smallest block is laid partly under the corner of the wall. Finally, at right angles to the central line of the western tower-wall is seen a peculiar bit of wall about 3 m long and 1.7 m thick. Only its one to two bottom courses, consisting of blocks of hard limestone, now re-



main; probably its upper courses were bonded in with the tower wall, whose external face is missing at this point.

The western part of the city wall, lying N.N.W.—S.S.E., joins — but is not bonded in with — the southern side of the tower 2.75 m inside its south-western corner. For a length of 15.85 m it is rather well preserved; northern half is standing to about the same height as the tower; the southerly half is about 1 m higher, owing to the slope of the rock upon which the wall is partly built, and the general slope of the ground in this area. The lower part of this southern portion is built of rather irregular and poorly dressed blocks (of hard limestone), less well constructed than in the upper part of the same wall and in the northern stretch of the wall. In both these places the same typical Hellenistic polygonal masonry is found as in the tower, even if the blocks (these too are of hard limestone) are not laid here in quite such regular horizontal courses as there. But no very sharp dividing line between these two kinds of masonry can be drawn (fig. 36), which, of course, does not do away with the possibility that the lower one may belong to an older period than the upper, Hellenistic type; this possibility is strengthened by the M.H. potsherds which were found in the clearing of the lower courses.<sup>1</sup> Here were also found — at a depth of more than 4 m below the wall coping — the remains of the foundations about 1.2 m wide, of a house, built of irregular stones, large and small, which had clearly been destroyed when the city wall was erected.

<sup>1</sup> Frazer, who had observed these different kinds of masonry, is inclined to date the tower to Mycenaean times (p. 19).

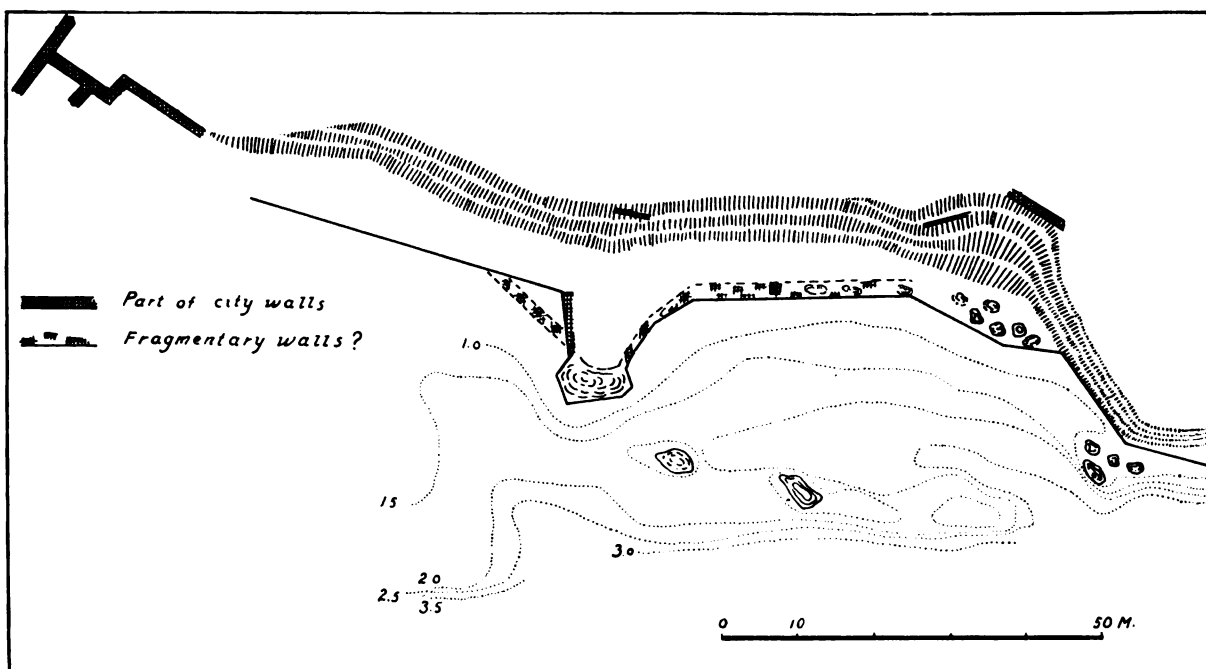


Fig. 37. Contour map of the 'harbour' showing the levels on the bottom.



Fig. 38. View of the 'harbour' from the acropolis.

Apart from the wall described above only faint traces can be seen of the parts of the western wall which lay above the shore; some odd foundations, with one or two courses of stone. This is certainly due to the action of the sea, washing against the shale and soft limestone, on which the wall was built, until it collapsed on to the steep strip of shore, carrying with it some of the deposit and house foundations from inside the wall. Below, on the shore, and under the water, can be seen many blocks, fragments of bricks, and the like.<sup>1</sup> To the S., north of an isolated rock sloping steeply to the sea, however, a piece of wall still remains, 8 courses high, for a length

<sup>1</sup> Under the action of the sea water rubble, bits of brick, lime gravel, sand and the like have hardened into a solid mass, resembling masonry, a process whose results can also be observed on the N.E. side of the acropolis, where something like 10 blocks that have slipped down from the fortress wall (S. of the entrance) on to the sandy bank below, have not only become very much worn and corroded by the waves, but also firmly caked together with the sand of the bank, which itself has hardened into a mass resembling sandstone. There is thus — in my opinion — no reason to consider the piece of masonry as a built quay, belonging to the ancient harbour as some wish to make out, and that in spite of the consideration that this supposed quay should have been constructed of proper blocks of stone, i. e. of the same material as the ancient city wall. The bricks within it indicate that in any case it should be dated to the Venetian period. That the city's harbour was located here, may be looked upon as an open question. The small rocks (figs. 37 and 38) some of which are visible above the surface of the water, and which follow the shore for a distance of about 20—25 m and for a length of 50 m, constitute, of course, a natural harbour basin and breakwater; the water inside this is, however, comparatively shallow and only to the S., at the 'harbour entrance', does it attain a depth of 2.5 m. And this is the present day depth; it should be recollected that the coast of the Peloponnesus, apparently, has sunk since Classical times (see Philippson, l. c., p. 436). — On the other hand, the whole of the bay west of the Lower Town may have constituted the harbour of Asine, where the ships in stormy weather could have been drawn up on the shallow shore.

of a few metres; the material is irregular, small and large blocks of hard limestone, and the masonry is reminiscent of the lower part of the wall S. of the N.W. tower. In the south, the short length of wall, running N.W.—S.E., and about 2 m high, which blocks the narrow gap between the isolated rock and the fortress rock, and which had been intended to bar all access to the uppermost terrace of the Lower Town, is built of still larger and more roughly hewn blocks also of hard limestone.<sup>1</sup>

## 2. THE TRIAL TRENCH E. OF THE PANAJIA

During the 1926 campaign a 3×3 m trial trench was opened up about 20 m E. of the chapel. In the course of this the following observations were made and the following sequence of strata obtained.

Under the surface layer of mould and the jumble of Hellenistic and Roman layers a collection of coarse, broken tiles came to light in the N.E. corner of the trench at a depth of 1.10 m below the soil. At 1.40 m numerous stones appeared all over the trench, which however lay at random, without any visible order; below the stones came Hellenistic pottery, and at 1.60—1.65 m some Geometric potsherds.

At 1.70—1.80 m L. H. pottery was found, mixed with Hellenistic and Geometric, the first however growing more and more numerous. Stones were still mixed with the earth and, finally, at the S. edge of the trench, at a depth of 1.75 m, remains of the rubble foundations of a building appeared with floors of well-rammed, partly fired clay, with an admixture of pebble, sherds of exclusively L. H. pottery, bones, and charcoal; the level of the floor was 2.0 m from the surface, and below it, as a foundation or bedding, was a layer of smaller stones to a depth of at least 2.15 m. Below the floor were a few sherds of Black Minyan.

At 2.20 m came to light remains of the foundations of an older building with its axis lying obliquely across that of the one above: they consisted of a wall 0.6 m thick, built of large and small stones, with smooth outer surfaces; to the N. of this wall and in connection with it, was a floor, which stretched across the whole trench at a depth of 2.35 m and was of the same kind as the floor above; here only L. H. pottery. At 2.45 — 2.60 m appeared a new course of the same wall, built of large stones, still with L. H. pottery.

At 3.10 m in earth, slightly mixed with stones, M. H. potsherds (Minyan) were found.

At 3.20 to 3.30 m Yellow Minyan pottery appeared together with Matt-painted, as well as a wall belonging to a building foundation running N.—S., and consisting of two, possibly three courses, of fairly large stones; W. of the wall and 0.2 m below its surface was a floor connected with it, consisting of a layer 0.02 m thick of rammed, partly fired clay, with a plentiful admixture of charcoal

<sup>1</sup> Frazer, though with some hesitation, dates this wall to Mycenaean times (above p. 19).



and ashes, and laid upon a course of biggish stones. The pottery was all M. H. II (Matt-painted, of the later geometric style, Yellow Minyan as well as some sherds of Black and Grey Minyan).

At 3.50 m Matt-painted I was found as well as Black and Grey Minyan, the black preponderating. At 3.6 to 3.65 m the former ceased, while the latter persisted together with rough ware.

At 3.70 m a house wall came to light, oriented almost due N. — S., and built of well packed, rubble masonry. The pottery was Black and Grey Minyan, as well as coarse ware.

W. of the wall and 0.40 m below its level came a layer of fairly large rubble, laid direct on the rock, clearly as a kind of terracing. In the southern part of the trench the rock was reached at 4.10 m. This sloped down towards the N., where it ultimately was reached at a depth of 4.45 m. Only M.H. pottery was found here: the potsherds found deepest down were Black Minyan as well as rough red ware.



Fig. 39. View of the Lower City from the slope of Mt Barbouna; cf. fig. 27.

### 3. THE ARCHITECTURE OF THE LOWER CITY

By ALFRED WESTHOLM

On the north side, below the acropolis, the natural rock slopes towards the north in various terraces, visible in the large section (fig. 77), which extends from just below the perpendicular rock of the acropolis through the whole area to a point close to the sea. Here was situated the Lower City of Asine. In Hellenistic times the whole area was enclosed by a great city wall (p. 48). Certainly, there were fortifications on the site also in earlier periods, but of these only scanty remains may have been found on the west side. Building operations were concentrated on the natural terraces, the level of which gradually rose. Examinations made at various parts have shown that building operations started on the lowest terrace and more or less contemporaneously on Terrace III. Superimposed on these houses were other architectural strata, so that the limits between the terraces were hardly visible when the excavations started. In certain parts the bedrock was found very near the surface (Terrace IV), while in others the depth of the debris was considerable (Terrace VI), but the ground had a gentle slope towards the north (figs. 39 and 40).

#### THE LARGE TRENCH

##### ARCHITECTURAL ELEMENTS

*Walls of the Early Helladic Period (fig. 42).*

*Wall 1.* The deep shaft sunk in Squares F—G 14, revealed a part of a circular wall found on the solid bedrock. It consists of rubble masonry carefully built and in places wedged together. The faces of the wall are distinct. Two courses are preserved.

*Walls of the Middle Helladic Period (fig. 42).*

*Walls 2—6.* These walls, situated in Squares I—H 2—4, seem to be the badly preserved remains of a house. In construction they vary a great deal, owing to their position. Walls 3 and 6 are built of somewhat larger stones, especially noticeable on the northern side. This is evidently because of the slope of the bedrock. Wall 2 is narrower and built of smaller stones. Its full extent towards the south was never investigated. A part of it had been damaged by a tomb (M.H. 21). Wall 3, too, was partly destroyed by the superimposed Walls 7 and 8. When Wall 8 was built, Wall 3 was thus cut off and only its bottom course remains below Wall 7. Wall 3 had a somewhat curved outline. Walls 4 and 5 are built of rather irregular rubble masonry and vary in width. All the walls

are laid directly on bedrock and Walls 2 and 3, 3 and 4, 4 and 6 seem to be bonded in with one another.

*Walls 7—9* form the outline of a suite of rooms (IV—XI) and are all similar in construction. To the south the walls are built on bedrock, while, to the north, the deposits of the lower strata form the substructure for the walls. Wall 7 is partly built on top of Wall 3. The walls are built of medium-sized rubble masonry so skilfully wedged that in some parts even more than six courses are preserved. While Walls 7 and 8 are more or less straight, Wall 9 shows a definitely curved outline. Near the south end, there is a doorway through this wall, some 0.90 m. wide, with a low threshold of smaller stones. To the south, this doorway is strengthened by a raised jamb-stone. These enclosing walls are bonded only with walls within them. Towards the south, Walls 8 and 9 have been cut off by the construction of other buildings of a later date (cf. below).

*Walls 10—14.* The area within Walls 7—9 is divided into a series of narrow rooms by long, generally parallel, walls (10—14). Wall 10 consists of comparatively large, irregular stones laid on the bedrock. In the east, only one course of stones is preserved while at the opposite end, the wall





Fig. 40. View of the Lower City from the Acropolis; in the background Mt Barbouna (left) and Ajos Ilias (right). The chamber-tombs of the L.H. necropolis I are visible as white patches on the slope of Mt Barbouna. The Geometric tomb (p. 192) was situated on the slope above the expedition's store-house and the Hellenistic tomb (p. 197) on the slope just to the left of the same.



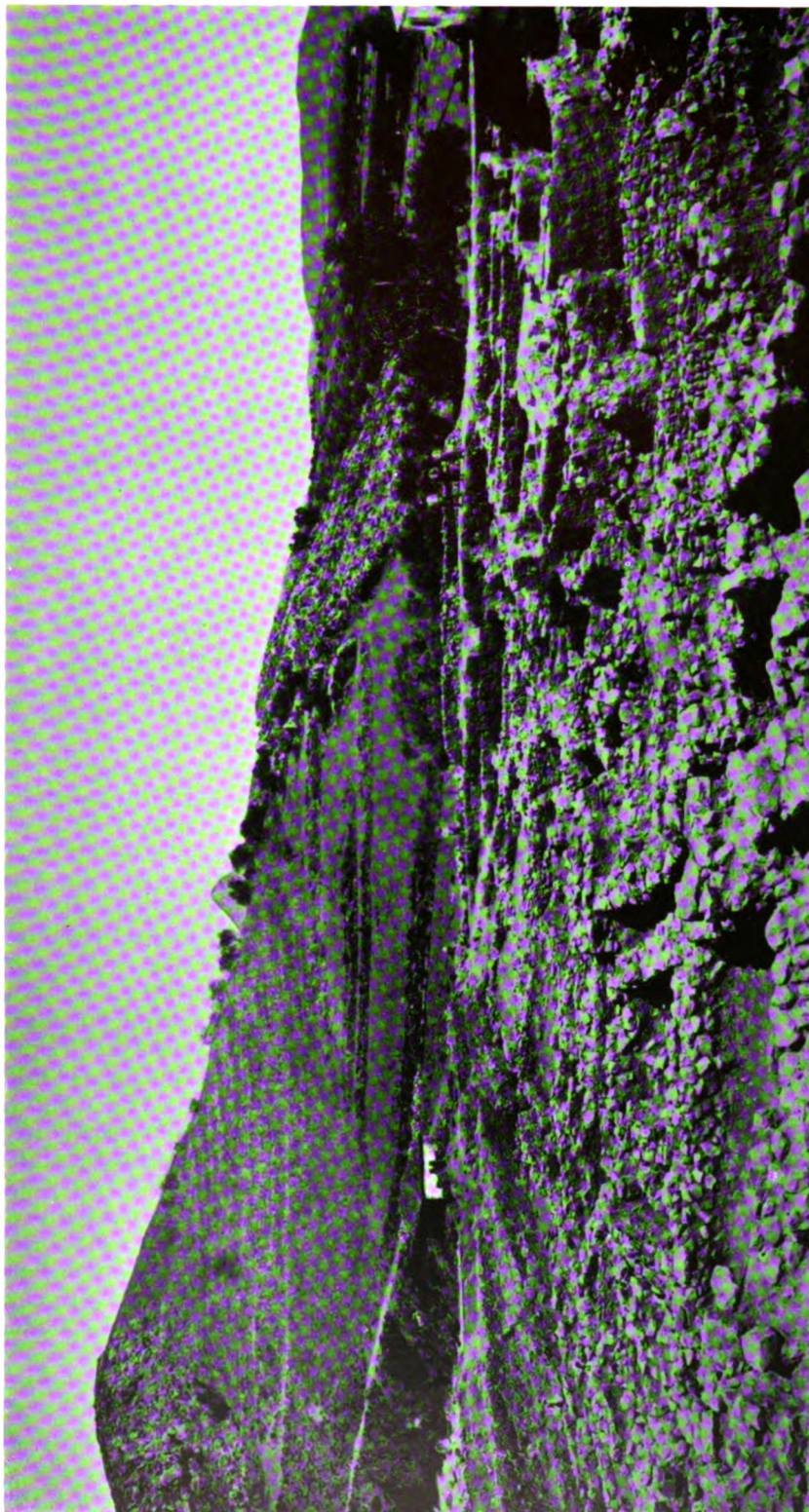


Fig. 41. View of the large trench in the Lower City from the south.

is preserved to a height of about 0.80 m. Wall 11 is built of small rubble laid in a very characteristic way. Often slightly triangular stones are used, placed with the pointed end towards the centre of the wall, while the faces of it are made up of the flattened, wider part of the stones. The wall, which is bonded with Wall 8, has an irregular outline. It has fallen down considerably to the north (fig. 48). Near Wall 9, there is a doorway through the wall, 1.0 m. wide. This is very distinct. The small piece of the wall, on the other side of the doorway, is bonded with Wall 9. The wall is also bonded with Wall 20 (cf. below). Wall 12 is of exactly the same construction as the previous one. It runs straight across the house and is bonded at both ends with Walls 8 and 9 respectively. In the middle of it some mud-bricks were preserved placed on the substructure of the rubble wall. The bricks, which extended over the whole width of the wall, were leaning in an oblique position. — The corresponding wall further to the north is Wall 13, of the same construction. In Squares I 5—6 it has been cut off and destroyed, probably during the construction of the Bath. It continues in Square H 6, (Wall 13 a) where, however, its course is difficult to trace, owing to the bad state of preservation of the walls in this part of the excavation. — Still further to the south, traces of a fifth parallel wall (14 and 14 a) can be seen.

*Walls 15—20.* There are also remains of walls dividing the narrow rooms between the walls described above, but they are, as a rule, in a rather fragmentary state of preservation. Wall 15 runs between Walls 13 a and 14 a, and further to the west a small room XI is enclosed by Walls 17—18, which are bonded with Wall 9. Wall 19 is a short piece of wall attached to Wall 12, and between Walls 10 and 11, and bonded in with them is found the short wall 20.

*Wall 21.* This wall seems to be connected with the system of walls described above, though its foundations are not on the same level as Wall 7, to which it is attached, and which is laid on the bedrock. Wall 21 is founded on debris containing plenty of pottery. Possibly it may be a later addition to the wall system mentioned. This wall extends to the south with a short fragment at right angles to it (21 a).

*Walls 22—24.* These walls are only partly cleared. As they are founded on debris at a higher level than the wall system described above, and which has partly destroyed some of the walls, it is evident that they should be ascribed to a construction of later date. The walls are built of irregular rubble masonry and enclose a large room (XII). This system of walls was traversed by a still later wall, which has cut off Wall 22.

*Wall 25.* This wall belongs to quite another system of walls than those described above. It is built on debris, in the south part not much above the rock. Rough stones of various sizes are used. The east face of the wall has a rubble socle consisting of one or two courses of stones.

This projects beyond the upper part of the wall some 0.25 m. in the south part of the wall, but disappears in the north. In Square G 4 the wall disappears under the superimposed wall 41. The wall is bonded with Wall 28 only. Owing to its bad state of preservation no other bonding can be determined.

*Wall 26.* Only a part of this wall is preserved. It is built on bedrock, and consists of rather coarse and irregular rubble masonry, of which only one course is preserved. The east part of the wall, as well as its junction with Wall 25, had been destroyed entirely by a number of tombs in and near Squares F-G 4. Its continuation to the west was also destroyed. The wall is bonded with

*Wall 27* which is laid on bedrock and disappears under Wall 40.

*Wall 28* is parallel to Wall 26. It rests on bedrock and is constructed of comparatively large, irregular stones. The north side in particular, facing the slope of the rock, is built of large stones. Most of the wall is hidden by the superimposed wall 40. The wall was certainly once connected with Wall 25 but this junction is now partly damaged. The west end of the wall, too, is damaged.

*Walls 29—32.* These walls are parallel to Wall 25, and show certain similarities in their construction. Their southerly portions are laid on bedrock, whereas the north ends of the walls rest on debris. The walls are constructed of irregular stones. Wall 29 is preserved only in fragments; a small piece of wall, between Walls 28 and 34, is aligned with it and most likely forms its continuation. Near Wall 35, there is a break in the wall which probably should be interpreted as a doorway. It may also have been caused by the tombs in Square F 7, which have evidently caused much disturbance. Wall 30 runs straight through the house from Wall 28, with which it probably was bonded or connected in some way. Its width increases towards the north. — Wall 31 is a short piece of wall of which only some scanty traces remain in the shape of small rubble laid on bedrock. — Wall 32, on the other hand, is comparatively solid, and built of rubble stones of various sizes. This wall is clearly bonded with Wall 28.

*Wall 33* is a small piece of wall just outside the south corner of Room XVIII. It probably served the purpose of a retaining wall for the slope, like the semicircular line of stones just north of it.

*Wall 34.* This is roughly parallel to Walls 28 and 26, and runs between Walls 25 and 32. The stones used in the wall are very irregular but the outline of it is well defined. As to the bonding, nothing can be ascertained. The wall was clearly constructed after the destruction of Wall 39.

*Wall 35* constitutes the continuation of Wall 25 with which it is bonded. It is also bonded with Wall 29. The south face is somewhat damaged, owing to the construction of the tombs in Square F 7.

*Wall 36* is a short piece of wall which divides Rooms XIX B and C from each other. It has one smooth face

towards the north while the other face is rough. This is due to its character as retaining wall for the floor in Room XIX C.

*Wall 37.* This is a wall of small rough stones, resting on deposit. It abuts on Wall 30.

*Walls 38 and 39.* These two walls probably do not belong to the system of walls described above. Their elevation indicates that they are of earlier date, and on both of them are superimposed walls belonging to the system discussed above. This wall 38 is partly built over by Wall 32, and Wall 39 by Wall 34. Their construction is rather flimsy and they are now in a bad state of preservation.

*Walls 40—44.* These walls seem to belong to the same system, forming together a house of rectangular shape. They must be separated from the wall system 26—37, as they are built over several of those walls. Walls 40 and 42 are of similar construction, as they are both built as terrace walls across the sloping rock. Their south faces therefore are comparatively solid and constructed of heavy rubble masonry, while the other faces of the walls are more indistinct in the lower courses preserved. The western portions of both walls are destroyed. These walls are joined with each other by Wall 41, which runs from north to south, and is bonded with Walls 40 and 42. The north end of Wall 41 is very solid, and much wider than the wall in the middle, between the two portions. There seem to have been a few steps, from a street east of the wall, up to this doorway. — Wall 43 is parallel with Walls 40 and 42, and runs between them. It is of much the same construction as Wall 42, except for the east portion, which resembles the south part of Wall 41. The actual junction between Walls 43 and 41 is missing, as a doorway is situated here, leading from Room XXII to Room XXIII. A short piece of wall (43 a), bonded with Wall 43, indicates that the two rooms XXV A and B were separated by a wall. Finally, Wall 44 runs between Walls 40 and 42, and is bonded with both of them. Parts of the wall are destroyed. It is rather weak in construction and differs considerably in this respect from the solid exterior walls of this system (figs. 51 and 52).

*Wall 45.* This serves as a support for a small platform just outside Wall 41. It consists of irregular rubble masonry and rests on bedrock.

*Wall 46.* The wall system described above is traversed by Wall 46 which is built on deposit at a higher level. It may be a terrace wall only. Other walls of a similar purpose are found in Squares H—I 2. — It seems necessary to describe Walls 46 a—c since they are connected with Wall 46. These walls, too, lie over the wall system to which both Walls 40 and 43 and Walls 41 and 44 belong. Walls 46 a—c are built of rubble of large and small stones mixed together and laid in a very rough way. They rest on bedrock, partly on top of the walls mentioned. They are, evidently, only the remains of some large structure.

#### *Walls of the Late Helladic Period (fig. 42).*

*Walls 47—51.* These walls lie on deposit at a much lower level than the rest of the walls in this part of the excavation and, as they are not bonded with any of them, they must be considered as belonging to an earlier period. The walls consist of irregular rubble masonry and are fairly well preserved. Their orientation, too, differs from that of the rest of the walls. Wall 47 is interrupted by Walls 60 and 62, and is traversed by Wall 58, which also runs across Walls 50 and 51. The south portions of these walls have been destroyed, evidently during the construction of Wall 67, by a superimposed system of walls.

*Walls 52—55.* These walls constitute the western parts of a large system of walls more or less connected with each other. The walls rest on deposit and are constructed of rubble. They are rather flimsy. Wall 53 is pierced by a doorway in connexion with a small stair leading up from Room XXX to Room XXIX. Walls 53, 54, and 55 abut on Wall 56.

*Walls 56—62.* These walls belong to a rather extensive system of walls which are all more or less bound together by means of actual bonding or by other features which show that they belong to the same house. Wall 56 consists of an inner core comparatively well constructed of mainly oblong stones. Along either side of this core, which is rather narrow, there are low rubble constructions resembling benches or ledges. These may be explained as being merely stones fallen from the wall, but their regular construction and well defined edges make the other explanation more probable. The wall is bonded in with Walls 57—59 and, like those, on deposit. It extends towards the south to Square F 12. In this there is a gap of about 2 m., but as a piece of wall in the south corner of the square is aligned with the part previously described, there is reason to believe that it is the same wall. In this case it turns to the south-west, where a piece of the wall (56 a) could be cleared, into Square E 12. (fig. 58). Wall 57 is similar in construction and abuts on Wall 60, which, however, is bonded in with Wall 58. This is rather irregular in shape. It runs in an easterly direction from Square G 14 to Square K 13. Though the wall at a first glance seems to have been constructed in several portions, there are no breaks in it. The wall is roughly parallel with Wall 59. This is constructed of irregular stones, mostly of medium size. This wall like Wall 58, is bonded in with Wall 62 but not with 61. The latter is of a construction similar to that of Wall 56, with a low ledge along the west side. The ledge curves in the north corner of Room XXXII and extends, too, a short way along Wall 58. — Wall 61 a is bonded in with Wall 61 and abuts on Wall 62.

*Walls 63—66.* The connexion between these walls and the system described above seems to be difficult to explain. The walls are levelled off to a lower height than the others, evidently in order to make room for the floor of Room



XXXIX, on level 7.90. The walls are flimsily constructed and do not bond in with any other system of walls.

*Walls 67—69.* These walls, too, belong to a lower stratum of walls, as they have been levelled off in connexion with the construction of Wall 70. There is no certain evidence to connect the walls with the house of Rooms XXVIII—XXXIV. The walls are founded on debris.

*Walls 70—71.* The walls 70—74 all belong to a system built partly on top of the walls described previously (Walls 59—69). Evidently they mark the outlines of a house of later date than the lower stratum. Wall 70 is a solid construction, resting partly on deposit and partly on top of a socle which is built over Wall 68 of the lower system of walls. It is built of undressed stones of various sizes. While the north part was not excavated entirely, it could be ascertained that the south end was bonded in with Wall 71. This is of a similar construction and runs over Wall 66 a, close to Wall 59, with which it is roughly parallel.

*Wall 72.* This wall seems to be a kind of continuation of Wall 71, though the two walls are not exactly aligned. The joint between the walls is rather vague.

*Walls 73—74.* These walls are bonded in with Wall 71 and must therefore belong to the same system. This is confirmed by the fact that they are both superimposed on Walls 61 and 63 of the lower stratum. The walls are similar in construction, consisting of undressed stones of various sizes. The northern sections of the walls have been destroyed. Both these walls have short appendices (73 a, b and 74 a), and are bonded in with the walls to which they are attached. Walls 73 b and 74 a form the partition between Rooms XXXVII and XXXVIII; the space between the walls in question may be explained as a doorway.

*Walls 75—78.* These walls together form a closed room, roughly rectangular in shape. The walls are joined to each other, with the exception of Walls 75 and 76, where the latter abuts on the former. The walls are built on deposit, of medium sized stones laid in comparatively firm courses. Along the western facade of Wall 76 there is a ledge of much the same kind as has been described in connexion with Walls 56 and 61 (cf. above).

*Walls 79—81.* These walls are of the same construction as Walls 75—78. The connections between the walls are, unfortunately, difficult to distinguish as they have been destroyed by the construction of tombs, or in other ways. Wall 79 is partly destroyed but very probably it was once connected in some way with Wall 75. It abuts on Wall 80 and is not bonded with Wall 82. — Wall 80 is straight and well outlined. Probably it was bonded in with Wall 81, though the joint was destroyed by the construction of the tombs in Square E 9. The wall abuts on Wall 85. — Wall 81 is parallel with Wall 78 and separated from it by a narrow corridor (Room XLVII). As the wall is bonded with Wall 81 a, which was never excavated

entirely, it is necessary to assume that the wall forms the east boundary of another room (XLVIII).

*Walls 82—84.* The space between Walls 77 and 80 is divided into small rooms by these walls. No. 82 is somewhat curved and consists of rubble masonry rather loosely put together. It is joined to Wall 83. Wall 84 seems to be bonded in with both Walls 77 and 80.

*Walls 85—88.* These walls are outside the east corner of the house, the walls of which have been described above. Their connexion with the house cannot be determined. They are of poor construction, built of irregular stones. Wall 85 seems to come to an end in Square H 9 but Wall 88 certainly extended further to the west in Square F 8. It has been destroyed by a tomb in that square.

*Walls 89—93.* These walls seem to belong to the same system of rooms, all built on deposit. They are comparatively irregular, and in rather a bad state of preservation, being in the vicinity of the Bath, which has interrupted many of the walls in this part of the excavation, *inter alia*, Walls 89 and 91. — Walls 90 and 93 are bonded in with each other, but it seems difficult to determine anything with certainty with regard to the rest of the junctions.

*Walls 94—96.* Possibly these walls, too, belong to the same system of rooms, or house, as Walls 89—93. The remains of the walls are too fragmentary to be determined definitely. The various parts are more or less bonded with each other. On part of Wall 94 a is superimposed a wall (97) of an upper stratum.


*Walls 97—100.* These walls, which probably belong to a building level lying above the previous one, are very fragmentary. The rest of the house to which they belong was destroyed by the construction of the Bath.

*Walls 101—102.* Whether these walls belong to a third, still higher level of building, or if they should be connected with the Bath, remains uncertain. In any case, Wall 101 is superimposed on Wall 100, which shows that they cannot belong to the same house. Walls 101 and 102 are clearly bonded and the ends of the walls abut on the walls of the Bath.

*Walls 103—105.* These walls are constructed of irregular rubble masonry. Walls 103 and 104 are bonded in with each other, but the corner between Wall 104 and 105 is damaged. Very probably, however, this latter wall was joined with the others, so that Room LII was closed on the east side as well.

#### *Walls of the Geometric Period (fig. 42).*

*Walls 106—111.* These very fragmentary walls were found partly on top of the wall system 75—78. They rested on deposit and were built of small irregular stones, rather loosely held together. Some of the walls are narrow and very badly constructed. They all constitute the remains of structures the detailed nature of which remains uncertain.

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Fig. 45. Rubble pavement and Tomb M.H. 104 in Square G 14.



Fig. 46. E.H. Wall 1 in Square G 14.

*Walls of the Hellenistic Period (fig. 44).*

*Walls 112–114.* These walls are narrow and the faces are carefully constructed though the walls are composed of small rough stones. Possibly they had a revetment of stucco. The stones are held together by lime mortar. The walls rest on deposit and bond in with each other. Wall 114 is bonded with a short piece of wall which very probably joined it with Wall 112, so that Room I.III was closed in on all sides. Wall 114 extended further to the south, though this part seems to be missing.

*Walls 115–116.* These walls seem to belong to the same system as the previous ones. No. 115 is comparatively wide and consists of mixed rubble masonry. It is bonded in with 116 which is much weaker in construction. The foundations of both walls rest on deposit.

*Wall 117* consists of a row of ashlar blocks placed so that one side of them makes a straight line while the other side is uneven. The wall, which is built on deposit, has Wall 129 superimposed upon it. It is bonded with Wall 119 and interrupted by Wall 128.

*Walls 118–125.* These walls are all oriented according to the same rectilinear system as Walls 112–117. In construction they have points in common with Walls 112–114, consisting of small undressed stones, mixed with single blocks of larger stones, sometimes roughly cut like ashlar blocks. Possibly these walls, too, had some kind of lime revetment. The walls rest on deposit. — Wall 118 has a doorway, 0.90 m. wide, between Rooms LVII and LVIII. The wall abuts on Wall 117, but evidently it was bonded with Wall 123. — Wall 119

has been built over by Wall 129. It is bonded in with Walls 120 and 124, and was cut off by Wall 133. Wall 123 abuts on it. — Wall 120 has been cut off by Wall 128. — Wall 121 consists of two sections, one west, and one east, of Wall 118, on which both parts abut. The western part is bonded in with Wall 122. This has been partly built over by Wall 133, and probably the north part of the wall was destroyed in connexion with the construction of the latter. The middle part of the wall is missing. Walls 124 and 125 are bonded with each other, the latter has Wall 130 superimposed upon it.

*Walls of the Roman Period (fig. 44).*

*Walls 126–132.* These walls are of quite another construction than those described above. It is true that they are made of ashlar blocks, and that these vary in size, but the walls are not narrow as the others are. They are comparatively thick, and the stones are held together by lime mortar. They are all bonded in with each other and clearly represent a system of walls superimposed upon the earlier walls. Thus, Walls 127 and 128 rest on the floor of Room I.VI, while Wall 129 is built partly on top of Wall 119.

*Wall 133.* This seems to be no real wall in the sense of a wall belonging to some building. It consists of a heavy and solid substructure of horizontal ashlar blocks bedded in deposit. It runs from Square D 8 to Square F 7 and is continued, after a break of about 7 m., in Squares G 7 and H 6. Evidently, Wall 133 should be connected with

a solid substructure in Square H 6, built of hard lime mortar and rough ashlar masonry, which may have been connected in some way with the Bath. More probably the wall should be explained as a kind of ramp or terrace wall for the area on which the structures described above are situated. It should be noted that both Walls 119 and 122 were damaged in the construction of Wall 133.

*Walls 134—137.* These walls are mere fragments bedded in the debris and consist of rubble held together with lime mortar. The walls are narrow, and probably had a revetment on either face. They were quite possibly all bonded in with each other, though the wall-corner between 135 and 136 is missing. Part of Wall 135 and the south part of Wall 137 are also missing. These walls enclosed a room, LXVIII.

*Walls 138—141.* The way these walls were joined to the system of Walls 134—137 is uncertain. Apparently, Wall 138 abuts on Wall 135. The walls are rather narrow and mainly constructed in the way described above. East of the wall 141, there are two raised ashlar blocks the meaning of which remains uncertain. Wall 139 seems to have had a kind of continuation to the south in a wall 139 a, over which Wall 142 was built. 139 a turns to the west, and it may be right to assume that this wall-corner was in some way joined to Wall 134, with which it is almost aligned. The walls rest on deposit and bond in with each other.

*Walls 142—145.* These walls make up a large square house which was partly built over by the walls of Room LXIX. The walls, bedded in deposit are comparatively wide and consist of irregular, rather undressed stones, held together by lime mortar. Walls 142, 143, and 144 are bonded together, while Wall 144 abuts on Wall 145. Between that wall and Wall 142 is the entrance into the house. Wall 144 is of a somewhat different construction, as it consists of vertical ashlar blocks on which the wall probably rested. The wall-corner 143 and 144 is more or less destroyed but the revetment of the inner faces of these walls shows the exact position of the wall. — This large square seems to have been divided into at least three rooms by minor walls, one extending from Wall 144, and one from Wall 145 (Walls 144 a and 145 a).

*Wall 146.* This consists of a row of upright ashlar blocks running from Square I 10 to Square K 11. They are simply placed on the debris and may be explained as the edge of a street or something similar running just outside the Bath.

*Walls 147—151.* These walls seem to have been connected with the aforesaid street, or with the Bath, with which one of the walls (150) is aligned. The walls are built of rubble and are comparatively thick. Very much mortar has been used. Wall 151 is pierced by a doorway. This wall and Wall 150 were not entirely excavated.

*Walls 152—154.* These are the almost destroyed remains of a rather solid construction situated in the south-east

corner of the trench. As the bedrock comes up rather near the surface at this point, most of the walls have gone. They consist, in their present state, of rows of horizontal ashlar blocks, oriented to fit in with a rectilinear system.

*Walls of the Roman Bath,* cf. below, p. 105.

#### *Floors.*

The steepness of the slope of the bedrock seems to have made it impossible to use it for flooring in the houses of the bottom strata. On the whole the floors were very difficult to determine, as they consisted merely of rammed clay or earth. Only occasionally the floors were clearly marked or constructed of other material. This holds good for the houses of the prehistoric periods, especially in the upper, south part of the trench. In Room XVIII, small limestone slabs were used as flooring. This may indicate that the room in question had not been roofed in. In the north part a couple of significant exceptions are to be noted. Room XXXII is provided with a floor of lime stucco. This floor had been repaired on several occasions. Room XXX, too, was provided with a similar floor, for which flat stone slabs had been substituted in the middle.

The floors of the Hellenistic and Roman strata were, of course, quite different. Here various kinds of concrete were found both in some of the rooms in House M and in House P. The floor of the latter house was coarser in consistency.

#### *Column bases.*

Naturally, the columns of the earlier periods were of very primitive shape, probably only wooden posts or supports for the roofs. Consequently, it is not surprising that the column-bases of those epochs are mere stone slabs suitable for the purpose. We meet with two comparatively well-hewn bases in Room XXXII, in House G. The southern one is roughly circular in shape and somewhat sunk in the floor. The other is like a semicircular slab of about the same size. Similar column-bases are found in House H. Room XXXIX has two bases arranged in the same way as in Room XXXII. The bases are placed exactly in the middle, between the long walls of the room, and they were on the same level, namely 6.98. The other column-base of the house was situated in Room XXXVII. Here, too, it was placed in the middle half-way between the long walls (63 and 74) of the room. Curiously enough, it was attached to the short piece of Wall 74 a, which may be a later addition to the house. This base is situated on practically the same level as the other two in Room XXXIX. — Room XLVI in House I offers a good example of the arrangement with one support in a room. Here a column-base is placed somewhat off the centre, but practically equidistant from the long walls of the room. This base is smaller in size but has a rounded outline.



### *Stairs.*

The few remains of stairs existing in the houses examined are very difficult to recognize. Just in front of Rooms XIX and XXI of House D, there are some rubble walls which may be explained as being either supports for the room in question or, more probably, as foundations for stairs. The wall in front of Room XXI in particular is levelled off as if for steps. If this interpretation be right, the stairs extended over the whole width of the rooms. — A narrow stair of quite a different type is found in House G, where three steps lead up from the floor of Room XXX to that of Room XXIX. This stair consists of large ashlar blocks laid on top of each other. — Possibly there were a couple of steps leading from the lane between Houses B and E up to the entrance of the latter house, in Wall 41. The nature of this stair cannot be determined. Evidently, its foundation was constructed of large rough stones. — There may have been a step south of the wall 134. The piece of wall here may have been the foundation for a stair.

### *Cistern.*

On the line between Squares C 4 and 5 was found the entrance into a large pear-shaped cistern, 5.10 m. deep and 4.30 m. wide at the bottom. Inside, it was lined with well-preserved cement. Evidently, this cistern was connected with the other arrangements of House M, described below.

### *Arrangements for pressing olive oil or wine.*

The way in which the various parts of the oil factory, House M, were used cannot be made out in detail. In Room LV two small basins were found along Wall 117. They are wedge-shaped, and one of them has a rounded short end. At the end of Wall 116, in the same room, there is a square ashlar block built into the floor, with a deep, square depression in the centre, which may be explained as the place where the bar for the press was fixed. Much the same arrangement is found in Rooms LXI and LXII. Here a similar square stone with a square depression in the centre is sunk into the concrete floor. No remains of any basins seem to be left in the same room (LXI), but in the next room is a small tiled basin placed close to Wall 119. The depression in the centre of the tile is circular. Another larger, keyhole-shaped basin is found in Room LVI, made of the same concrete as the floor. As the eastern part of the room was destroyed other objects may have existed in the room which might have explained the meaning of the basin.

In House P, too, certain arrangements indicate that the house served a similar purpose as House M. In the floor, preserved in the south-west part of the house, there

is an elevated line in the concrete running from Wall 143 in a northerly direction to Wall 144 a, thus forming a kind of a compartment in the north corner of the room. In the corner between this concrete line and Wall 144 a there is a small basin made perhaps to receive a liquid from the floor, which slopes in the direction of the basin (Square D 10). East of the concrete line mentioned, there is a circular stone sunk in the floor. It has a bevelled hole like a millstone. In the floor, north of Wall 144 a (Square E 10), there was a circular stone with a rectangular depression in the centre as in two of the rooms of House M. The whole is too fragmentary to be explained in detail.

### *Kilns (fig. 66).*

On two occasions, things were found which should be interpreted as kilns. Close to Wall 70, in Room XXXIX, a kiln was found which consisted of rubble laid on an oval plan. The clay was supported on the outside by smaller stones. The inside is divided into two compartments by an upright tile. The kiln was closed by a plaque of baked clay pierced by three holes. In the vicinity of the kiln a certain quantity of ash and charcoal was found. The kiln reminds one of those used for firing pottery. The fire, with plenty of charcoal, was placed below the shelf on which the pots were arranged the whole being domed over with a clay cupola which in this case was destroyed.

Another kiln of a similar, though more complicated, type was found in Room XLII, belonging to House I. Built against Wall 80, an oval structure was found, this too, was made of burnt clay. The same arrangement as in the previous case could be noted: a fire-place below, closed with a plaque with vent-holes. The domed upper part of the kiln had collapsed, but most of the pieces were found, fallen down over the plaque (fig. 66). Probably there were vent-holes in the upper structure, too. Near the kiln, large pieces of vases were found on the floor of the room. Cf. Mylonas, *Excavations at Olynthus*, 1929, p. 12 ff.

### *Lime kiln (fig. 67).*

In Squares E—F 13, a large structure was found which had been dug out in the debris from the level at least of House O, almost to the level of House G. It was clearly a kiln for burning lime. It is circular in shape, has bulging sides, and is provided with a shelf, about 0.60 m. above the bottom. The upper, domed portion of the kiln has been destroyed. The whole is built of rubble and small stones held together with lime mortar, which also covers the inside. The north part of the kiln with the opening was destroyed.

## ARCHITECTURAL ANALYSIS

It has been pointed out already in the description of the walls that four different sections are to be distinguished within the excavated area. In each of these sections more or less closely connected rooms are noticeable, which form groups or houses. In each part various strata can be distinguished with houses of different epochs, superimposed upon each other, the lower strata being destroyed before the house of the upper stratum was constructed. In this way it has been possible to establish a kind of relative chronology within the various parts simply by means of an analysis of the architectural remains. The walls are numbered in accordance with the result of this analysis; and the walls of each house are kept together in the above description.

The house to which Wall 1 belongs was never examined and there is thus no possibility of determining its entire shape. The curved outline of the wall indicates, however, that the house has an apsidal plan, most probably like the house R on Terrace III (cf. below). The house is situated on a much lower level than any other building excavated within the area.

As to other constructions, omitting the Bath which will be dealt with separately, we start the examination in the south-east part of the area.

## HOUSE A (fig. 47).

The house enclosed by Walls 2—5 is roughly rectangular in shape. As Wall 7, of the large construction to the north of it, is built partly on top of Wall 3, it is clear that the house must be of an older period. The house is divided lengthwise by Wall 6, which probably had an entrance to the east, near Wall 2. The east part of Wall 5 is destroyed and it may be correct to assume that the house was entered from this side, as there is no other entrance visible. The possibility also remains that parts of the house have still to be excavated, especially to the south-east.

## HOUSE B (fig. 47).

The structure north of House A is much larger in size. The south part of it is well defined by Walls 7—9, all bonded with each other. The northern portions of the house, however, have been entirely destroyed by the construction of the Bath and other buildings of later date in its vicinity. The house is characterized by the peculiar arrangement of the rooms within the outside walls, of which the western one curves in slightly to form a kind of apse. The whole house is divided into narrow rooms or corridors by walls which, at least in some cases, are bonded with the outside walls and must therefore have been built at the same time. The two northern walls in this corridor system have been damaged by the Bath. Some of the corridors are divided by cross walls into smaller rectangular rooms. The entrance into the house is from the south. Near the south-east end of Wall 9, a doorway leads into the small Room V, from which the other rooms, too, are accessible. There is nothing to indicate that the rooms within

the outside walls should be dated to different periods. Wall 21, however, which undoubtedly is connected with this house, must be a subsequent addition, as its foundations rest on a much higher level of debris than the wall (7) to which it is attached. Evidently, it is either a question of another house to which parts of House B have been added or — more likely — the addition of a room or two to House B on the south-east.

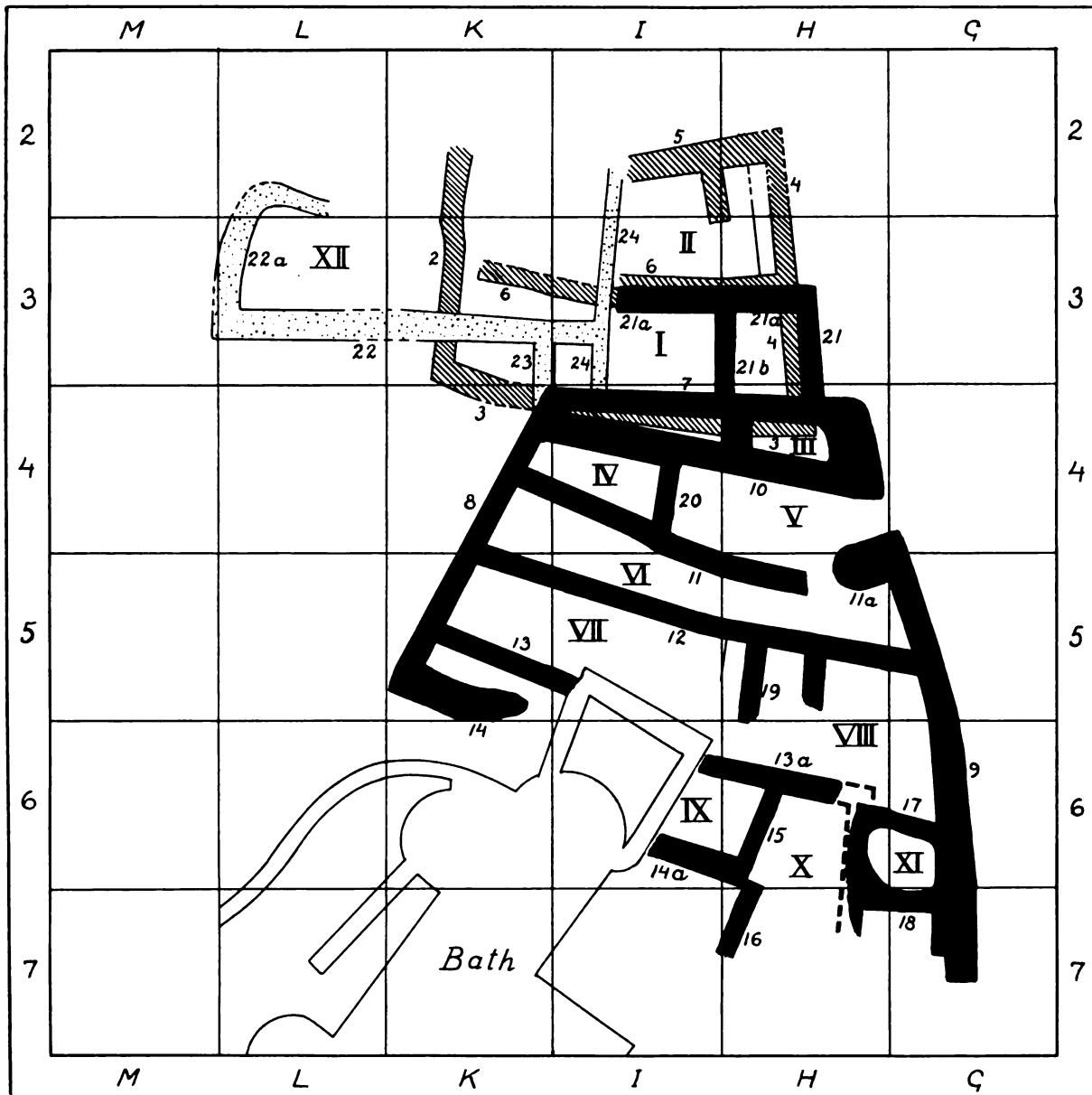


Fig. 47. Analytical plan of the M.H. houses A—C. (Latticed walls = House A; black walls = House B; punctated walls = House C).





Fig. 48. View of House B from the east.

#### HOUSE C (fig. 47).

Above these houses of the two lower strata, the remains of a third house (C), very much destroyed, were found within the same area. As Wall 24 of this house has cut through Wall 6, and Wall 22 is superimposed on Wall 2 of House A, it is evident that the house C was built after House A was destroyed. But Walls 23 and 24 seem also to be built over the east corner of House B. In any case, their foundations are on a higher level than this house. In view of these facts it is reasonable to date House C to a still later period. The remains of the house are very fragmentary. Only one room (XII) can be distinguished. Its south wall has disappeared or was never excavated. Possibly Wall 23 and the north part of Wall 24 should be explained as buttresses to the house, resting on Wall 7 of House B.

In the same sections of the trench some walls of still later buildings were cleared. Thus, Wall 22 had been cut through by a piece of a wall running in a north—south

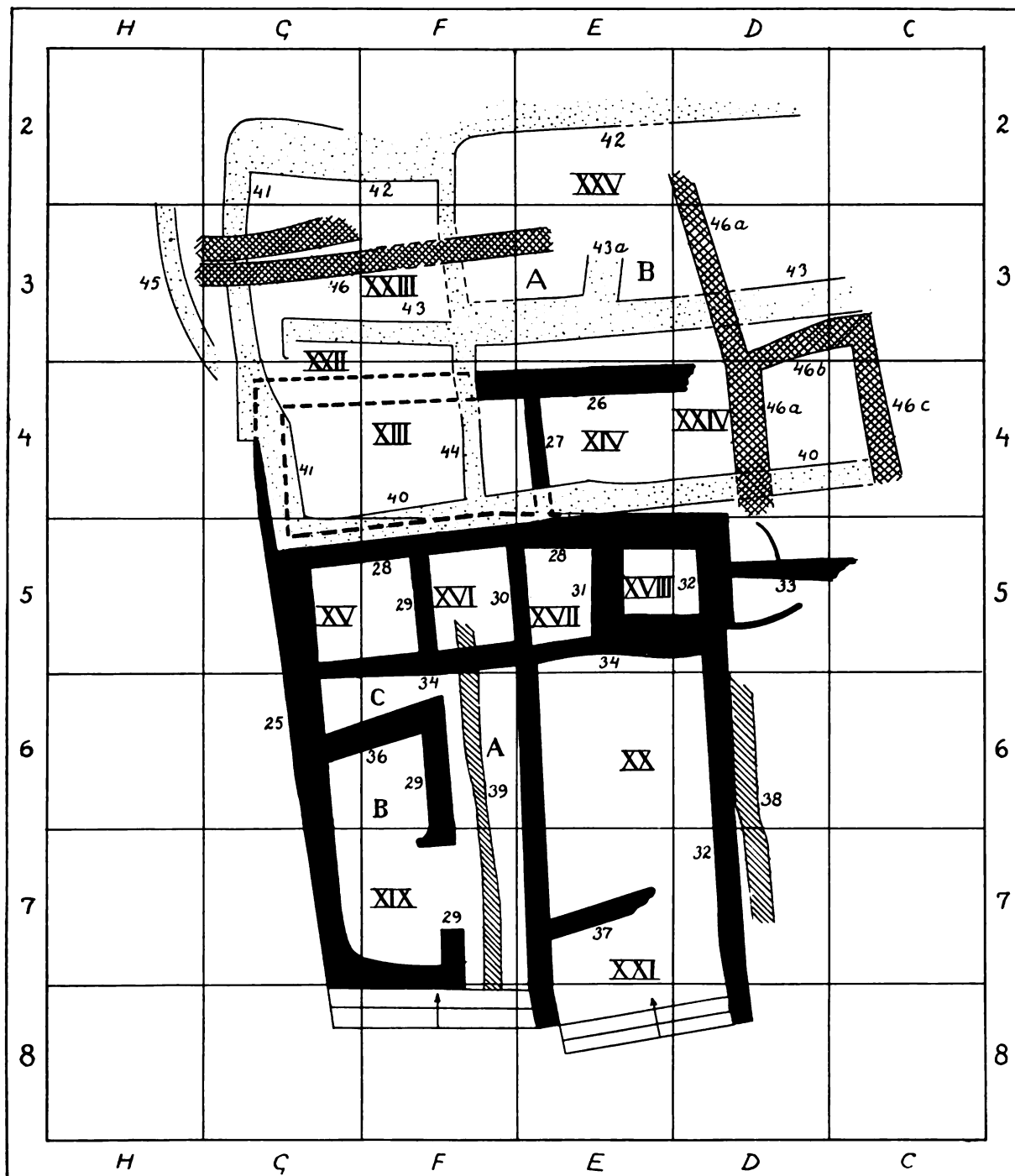


Fig. 49. Analytical plan of the M.H. houses D—E. (Latticed walls = earlier than House D; black walls = House D; punctuated walls = House E; hatched walls = probably L.H. walls).





Fig. 50. The lane between Houses B (left) and D (right).



Fig. 51. Foundations of House E from the east.

direction. This wall had been damaged considerably by some tombs within the area of Room XII. Neither the date nor the purpose of these later walls could be ascertained.

#### HOUSE D (fig. 49).

That part of the excavated trench which is situated south-west of House B contains quite a conglomeration of walls, which can be attributed to various houses and strata. This block of rooms is definitely separated from that of House A—C by the lane between Walls 9 and 25. This lane makes it probable that Houses B and D were in use at the same period; a suggestion which is confirmed by the fact that the two houses are built on practically the same level.

The walls in this part of the excavation are not so easily distinguished from each other as the walls of Houses A—C, partly because of the bad state of preservation of some of the more important parts. Furthermore, in Squares E—G 3, the walls of various periods have sometimes been levelled to about the same height, making the distinction between the different constructions difficult, as most of the walls in this part rest on or near bedrock.

House D seems to be enclosed by Walls 35—25—26—32. The walls within this rectangle are in some way connected with these outside house walls. As Walls 40



and 41 are partly superimposed on Walls 28 and 25, and Wall 44 runs across Wall 26 of House D, it is clear that they must be assigned to an other house (E) constructed after House D had been demolished. In this way it is possible to separate the walls of House E from those of House D. This presents a rather complicated plan. Three portions can be distinguished, separated by the solid walls 28 and 34. The northern part of the house is entered through two doorways facing north-west. The more westerly of these entrances leads through a kind of vestibule between *ante*-like walls into a large rectangular room (XX), which seems to be the main room of the whole building, separated from all the other rooms. The east entrance leads directly into a corridor (Room XIX A) which communicates with two rooms on the left hand side (Rooms XIX B and C). The central part of the house consists of four smaller rooms, square in shape (Rooms XV--XVIII). The way these were entered cannot be determined, as no traces of any doorways survive. The back of the house is occupied by two rectangular rooms placed across the whole width of the building (Rooms XIII and XIV). It is possible that Room XIII communicated with Room XV by a doorway near Wall 25. On the other hand, the two Rooms XIII and XIV are, as far as can be seen, not in communication with each other. Almost the whole of the south-east wall of Room XIII had been removed in connexion with the construction of the tombs in Squares F—G 4. The east corner of House E is therefore missing. Furthermore, the west wall of Room XIV has been carried away, washed away by the rains like most of the walls and debris in these parts of the excavation. It may be true that parts of the house were once situated here, and that they have gone the same way. The short piece of Wall 33 which is preserved, seems to indicate this.

Two walls (38 and 39) must belong to some building of earlier date than House D, as they have been levelled in order to make room for the new construction; Wall 38 serves partly as a kind of foundation for Wall 32, and Wall 39 was reduced to the floor-level of Room XIX A. Possibly these walls belonged to the same construction, of which nothing else is preserved.

#### HOUSE E (fig. 49).

The way in which the walls of this house can be distinguished from the walls of House D has been described above (p. 63). This house, too, is roughly rectangular in shape. The western portions of it have been washed away, and the parts left to the east are in a rather bad state of preservation. The house is enclosed by Walls 40—42. This large area is divided into four rooms by Walls 43 and 44 (Rooms XXII—XXV). The house rests partly on the solid bedrock, partly on top of the remains of the demolished House D. Possibly the house was entered from the west, but there is an entrance into the house from the lane mentioned above, between Walls 9 and 25. The lane extends as far as the east corner of House E. Entrance from the lane seems to have been effected by a couple of steps up to a threshold in Wall 41, at level 11.55.



Fig. 52. Foundations of House E from the west; to the left, Wall 40.

The means of communication between Rooms XXII and XXIII is a narrow doorway marked by a jamb on the west side. Whether there were doorways between the other rooms of this house or not is impossible to ascertain because of the bad state of preservation of the walls. — Just outside Wall 41, there is a small terrace or ledge in the rock held up by Wall 45. The edge of this terrace may mark the street or lane outside the house.

Wall 46 must be of a later date than House E, as it runs straight across the demolished walls of that house. Probably the wall does not belong to any house at all, but should be explained as a mere terrace wall supporting the earth south of the area examined above. Walls 46 a—c, however, may have formed part of a house.

#### HOUSE F (fig. 53).

We now proceed to the analysis in the north portion of the trench, and begin the investigation in Square I—K 13—14. There we find that Walls 47—51 are differently oriented from the surrounding walls. Above these walls runs Wall 58, which evidently was built after the walls of House F were demolished. The remains of the house are too scanty to allow of a reconstruction of the plan. Only two rooms can be distinguished (XXVI and XXVII), but evidently there were others.

#### HOUSE G (fig. 53).

The large block of rooms found immediately on top of House F should most likely be assigned to one building, though not all the walls are joined by actual bonding. Possibly the house was gradually enlarged by the addition of new rooms. The house consists of Rooms XXVIII—XXXVI. The floors of these rooms are on practically

the same level, and the small differences which could be noticed are not sufficient for a reconstruction of two or more different houses. A glance at the plan shows that the house was not completely excavated. It evidently extended further to the north, and we must therefore assume more rooms north of Wall 57. Room XXVIII, too, ought to have a continuation towards the west. The eastern boundary of the house seems to be fairly well determined, though things here were in a worse state of preservation, and it is therefore impossible to ascertain whether there existed any connexion between House G and Walls 67—69. To the south, one of the walls of the house (56) continues into Square E 12, which seems to lead far from the enclosed group of rooms, here called House G. The rooms are grouped between the two more or less parallel walls 58 and 59. Here, two large rooms are noticeable occupying the whole width of the structure (Rooms XXXII and XXXV), separated by the small Rooms XXXIII and XXXIV, which, both together, extend over the same width. Room XXXII seems to hold a predominant position within this house. This is confirmed both by the column-bases and the well preserved concrete floor and by the interesting finds made in this room (cf. p. 298). Possibly Room XXXII was connected with Room XXXI by means of a wide doorway in Wall 58. There is nothing preserved of such

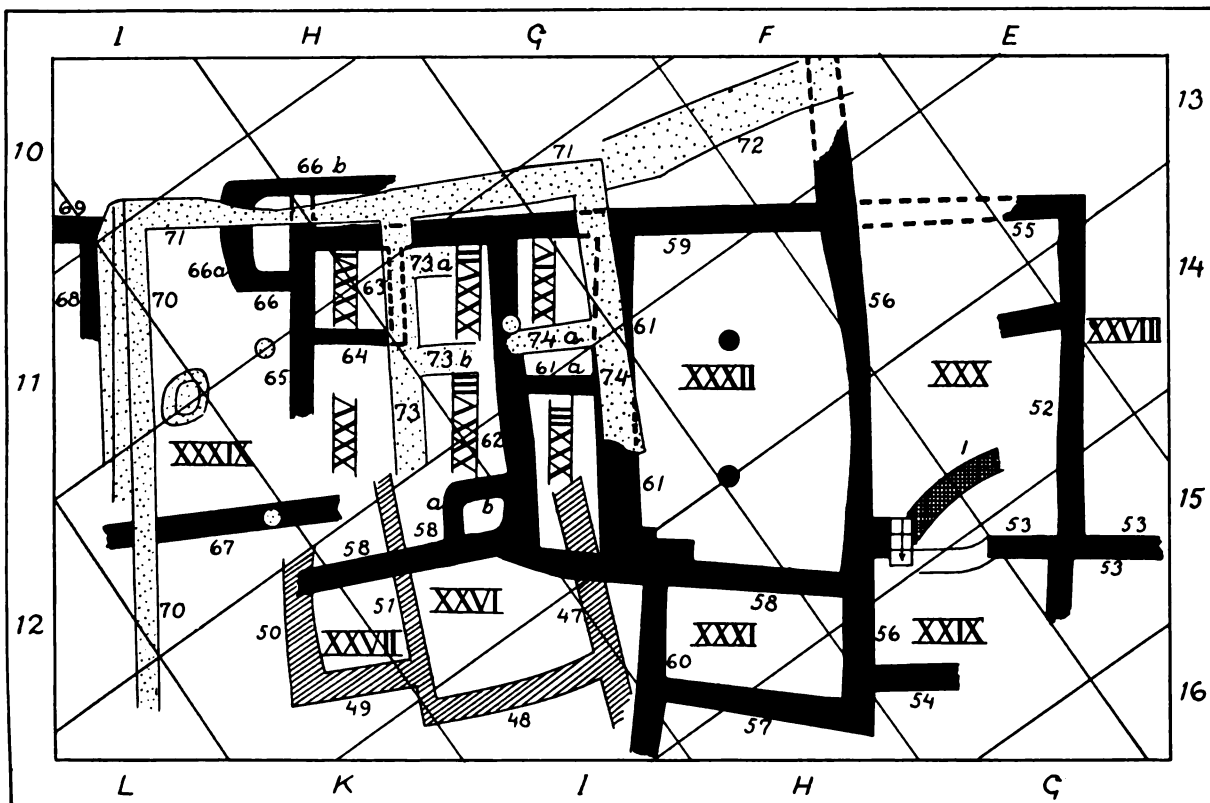


Fig. 53. Analytical plan of Houses F—H (Latticed walls = House F; black walls = House G; punctated walls = House H; the hatched wall in Squares F—G 14 belongs to an E.H. house).





Fig. 54. View of Room XXXII in House G from the south-east.

a doorway, but a line of rubble masonry along the north side of the wall may be explained as a support for a threshold. West of the large, hypostyle Room XXXII, the same arrangement is repeated in a similar way. Room XXX, slightly smaller than Room XXXII, is connected with Room XXIX by means of a small stairway of four steps. The floor of Room XXIX ought thus to have been situated at a somewhat higher level than that of Room XXX. Whether this arrangement was repeated once more further to the west could not be ascertained. Room XXX seems to have been divided by a wall which runs eastwards from Wall 52. — In the east corner of the house are some smaller rooms (XXXVI, and the space enclosed by Walls 66 a and b). The nature of these cannot be determined, because of the bad state of preservation in this part of the excavation.

#### HOUSE H (fig. 53)

The eastern part of this house has been built over by structures whose foundations partly rest on top of its demolished walls. The eastern and western portions of these structures need not necessarily be joined to one building as a short piece of Wall 71 about 1 m long was missing, but as the walls are built at practically the same level, and the floors of the rooms also, the suggestion that the whole block of rooms





Fig. 55. The street between Houses G (left) and I (right) from the west.



Fig. 56. The same street from the east; in the foreground, parts of House H.

belongs to the same house seems to be right. Evidently, only the south-east corner of the structure is preserved, the north and west sections having vanished. This house, too, seems to have been planned on the rectilinear principle. Three rooms can be made out (Rooms XXXVII—XXXIX). Rooms XXXVII and XXXVIII lie between the two parallel walls 73 and 74, and are connected with each other by a doorway. The roof of this part of the house may have been supported by a column placed on the base found in Room XXXVII, close to Wall 74 a, and exactly equidistant from the side walls 73 and 74. Unfortunately, no other column-bases were found in this part of the house. Room XXXIX, situated east of the two rooms, is of considerable size, and rectangular in shape. The roof of this larger room was supported by columns resting on the two column-bases, which were of practically the same height, 8.00. Both lie exactly halfway between the walls 70 and 73, which form the long-walls of the room. There may possibly have been a third column-base north of the others, and aligned with them. The kiln found close to Wall 70 must belong to this room. It remains uncertain whether this house (H) was connected with some very fragmentary remains of houses discovered and cleared further to the south-west (Wall 72 and, less likely, Walls 106—107).



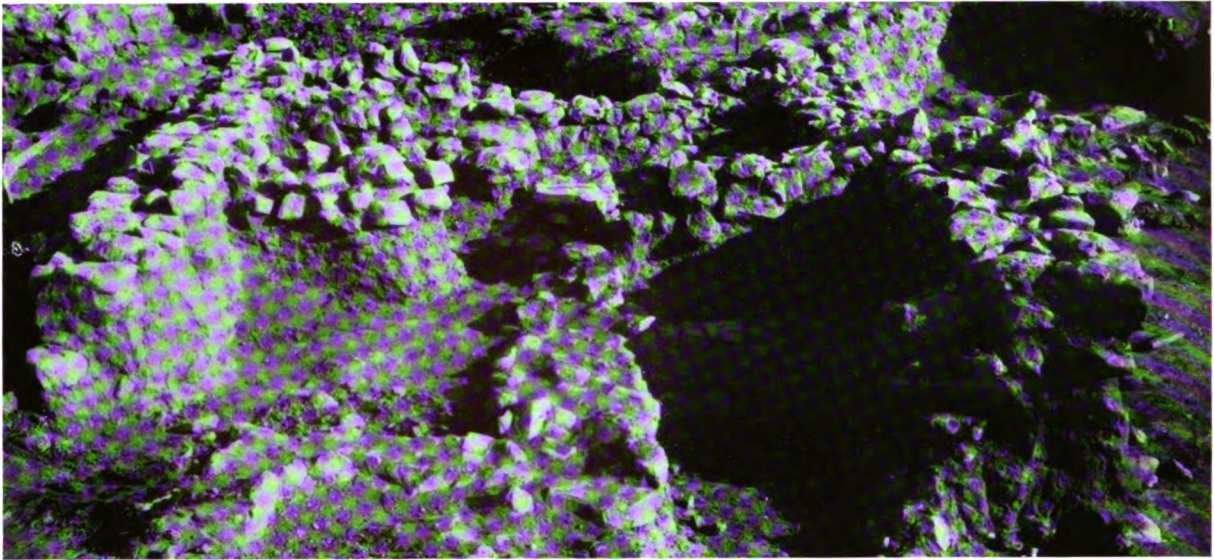


Fig. 57. Central part of House H from the north.

#### HOUSE I (fig. 58).

This house is well defined and in a comparatively good state of preservation. The foundation walls are completely preserved, except for parts of the eastern outside wall (79), and some other sections, where damage had been caused by tombs dug in the debris of the house. The centre of the house consists of the large Room XLVI, almost rectangular in shape. The ceiling of this room was supported by a column placed somewhat off the centre. The base is still preserved. Around this central room, the entrance into which could not be determined, other rooms are grouped on the east and south sides (Rooms XLII—XLV). These are enclosed on the outside by straight walls which apparently constitute the exterior walls of the house; it has a more or less square ground-plan. While Rooms XLII—XLIV are minor rooms, situated behind the large main room of the house, Room XLV extends almost along the whole side of the house. On the west side of the main room there is a narrow corridor or lane which separates the house from another structure (Room XLVIII), not entirely excavated. All these rooms join together to form a single house, as is clear from the bonding of the walls. Just outside the eastern corner of the house, however, there are some walls enclosing Rooms XL and XLI. These are not bonded in with the rest of the house though they undoubtedly belong to it. Possibly Wall 88 was continued to the west, so that Room XL was closed on this side. The small room XLI reminds one very much of the arrangements in the east corner of House G (cf. above). The question as to where the main entrance into the house was situated, could not be solved. Very probably the main, hypostyle room (XLVI) was entered directly through a doorway in Wall 75, but nothing was observed which could define the nature of



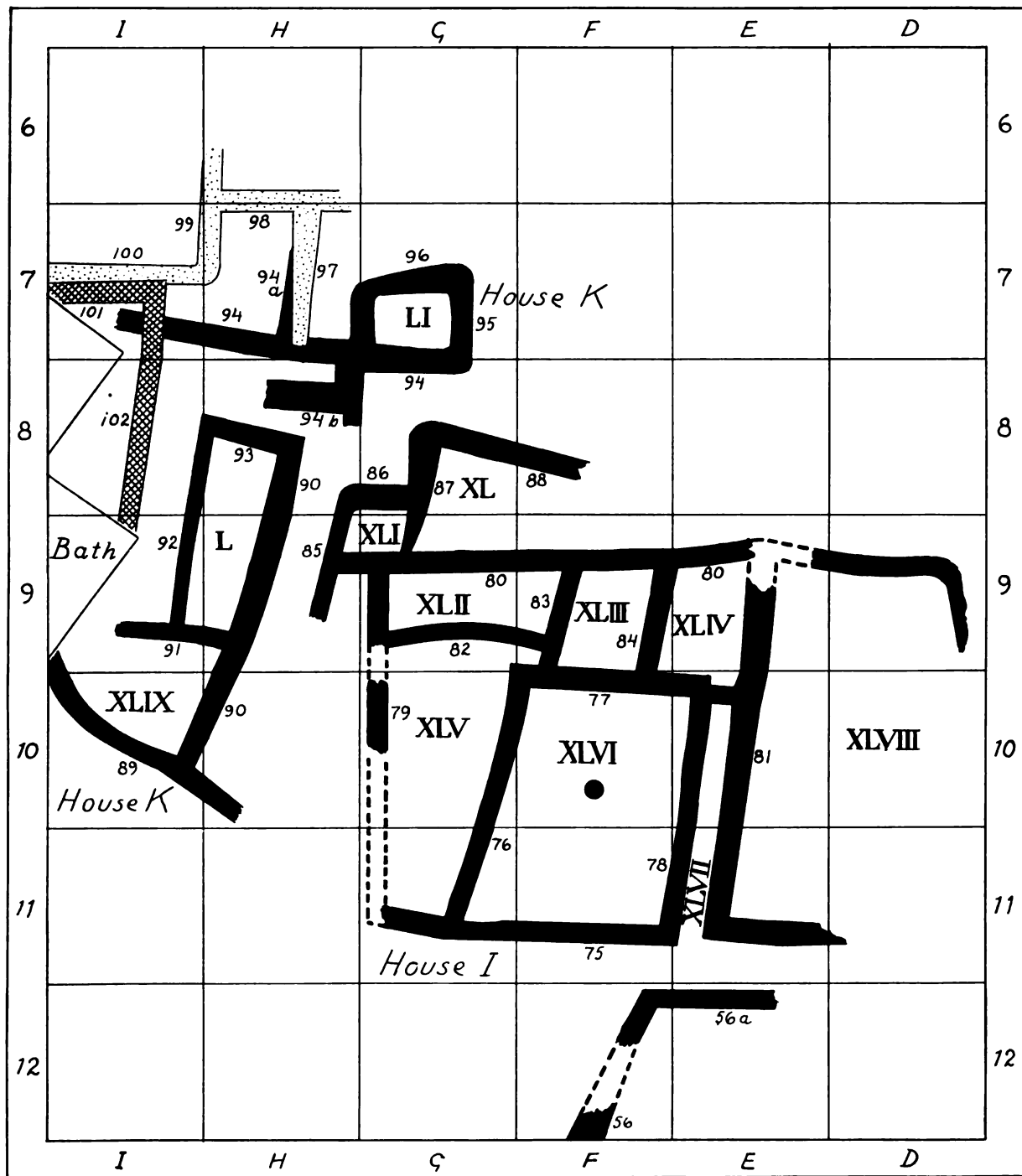


Fig. 58. Analytical plan of Houses I and K.



Fig. 59. Foundations of House I from the south-west.

this. On the other hand, the house may have been entered from the north-east through Wall 79, part of which is missing. Most likely both these entrances existed.

#### HOUSE K (fig. 58).

East of House I, a lane or street is noted which is closed to the east by the remains of House K. The bulk of this was entirely destroyed when the Bath was constructed, and the remaining walls are not sufficient for a clearer description of the house, or a reconstruction of it. The house was possibly entered from the lane, because there is an opening between Walls 93 and 94, which might be interpreted as a doorway. This seems to lead into a large room which has been destroyed almost entirely by the Bath. To the north, two rooms can be made out (Rooms XLIX and L), but there is nothing which gives any further information as to their nature.

The scattered walls 97—100 must belong to a structure of later date than House K as their foundations lie at a much higher level, and are partly superimposed on the walls of the house. Still later in date is Wall 102, which in some way or other may be connected with the construction of the Bath.

## HOUSE L (fig. 60).

Walls 103—105 enclose Room LII, which is rectangular in shape. As far as could be ascertained it was not joined with any other structure examined during the excavation. It is probable that parts of this house were destroyed when the Bath was constructed. Other parts of the house were unexamined, as a road, leading up to the small Panajia, had to be left unexcavated. Below the floor of Room LII, some remains of walls of a lower architectural stratum were discovered. As these walls were not sufficiently examined, they are here omitted from the discussion.

## SCATTERED WALLS ABOVE HOUSE I (fig. 61).

Before passing on to the uppermost architectural stratum, which is clearly separated from the lower ones, some points may be noted as to the walls 106—111. They seem to have no connexion whatsoever with the other architectural remains, and, besides, it seems to be difficult to discover how they should be connected with each other. They all clearly lie above some of the walls of House I, and can therefore not be brought into relation with that lower stratum. On the other hand, it is true that

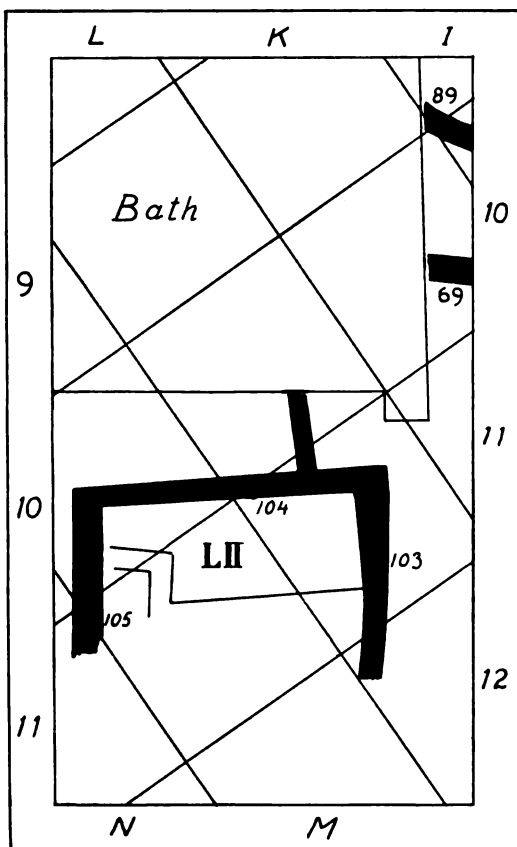


Fig. 60. Analytical plan of House L.

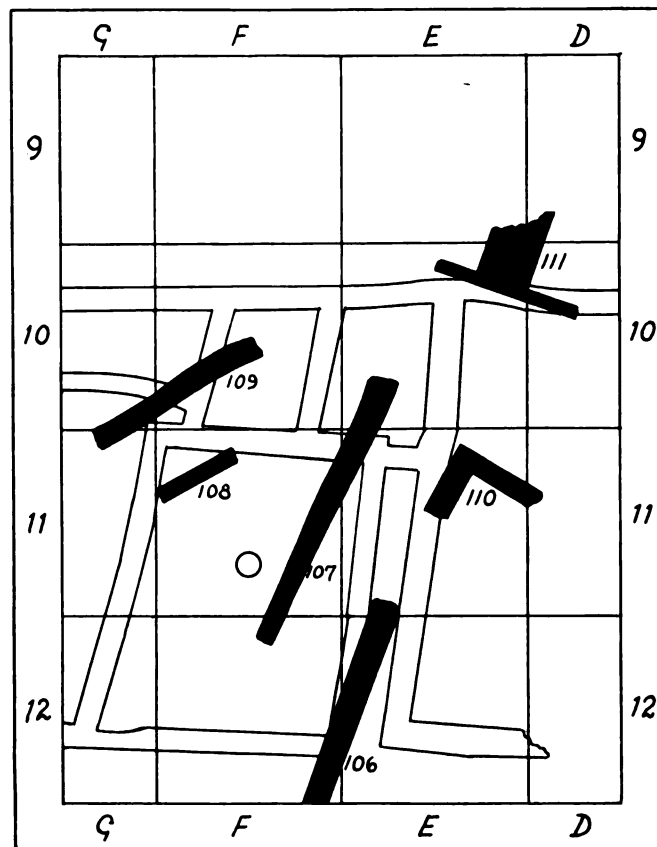


Fig. 61. Analytical plan of the Geometric walls above House I.



some of the walls in question (106, 107, 110, and 111) show the same orientation as the wall-system of the uppermost stratum, but they cannot on stratigraphical grounds be assigned to it, though some of the upper parts of Wall 107 reach a level immediately below the foundations of House P.

Practically nothing can be gathered from the walls. The parallel walls 106 and 107 seem to mark the outline of a lane or street, which may have been shut in to the west by a structure to which Wall 106 and the wall-corner 110 belong. Wall 111 may have joined this rectilinear system. Walls 108 and 109 are too fragmentary to be used for any reconstructive purpose. — It must be pointed out here that all these walls may have been connected in some way or other with the architectural stratum of House H, though the bad state of preservation of the walls makes it impossible to draw any safe conclusions.

#### HOUSE M (fig. 62).

This house is situated in a stratum above House D, from which it was entirely separated by layers of considerable depth. Also its orientation is entirely different, and it is, consequently, an advantage to make the analysis of this upper stratum entirely separate from the analysis of the lower stratum.

It has been pointed out already in the description of the walls that two different architectural strata are easily distinguished in this part. Considerable damage was done to the foundations of the lower house when the upper one was constructed. The lower house, M, has small, thin walls oriented roughly in a north—south—east—west direction, and strictly rectilinear. The floors are comparatively well preserved in some of the rooms. Evidently the house can be explained as a small factory for pressing olive oil (cf. below). The ground-plan of the house shows a conglomeration of small, rectangular rooms. The exterior walls of the house were all destroyed, or, in any case, not found. The large cistern in Room LV evidently belongs to the house, and communicates by means of small canals or pipes with other small basins on the floor of the same room. Another keyhole-shaped, cemented cavity in the floor is found in Room LVI. Other circumstances which should be connected with the manufacture of oil are found in Rooms LXI and LXII.

#### HOUSE N (fig. 62).

This house rests in part on the floors and foundations of the previous one. The walls are distinguished by their thickness. The portions of the house preserved are mainly localized to a building with a square ground-plan, containing Rooms LXIII—LXVI. This construction is rather badly preserved, so that it seems impossible to ascertain whether there were other parts joined to it. Wall 127, which projects beyond outside walls of the square, seems to indicate that there were other rooms belonging to the

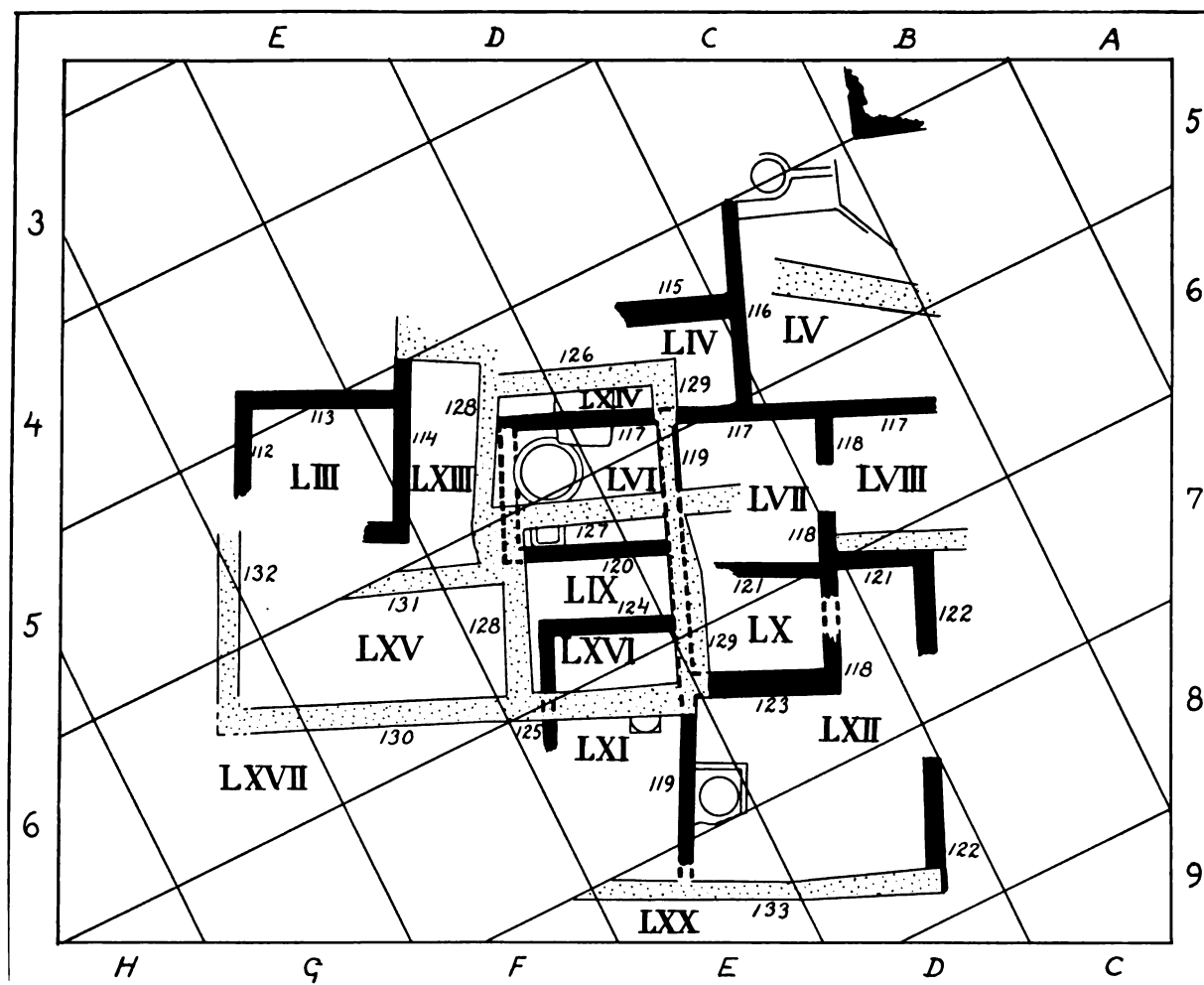


Fig. 62. Analytical plan of Houses M (black) and N (punctated).

same building, at least in the west. This impression is strengthened by a short piece of wall in Square C 6—7, close along Wall 121. This fragmentary wall may be explained as belonging to House N.

The large terrace-wall 133 was most likely constructed at the same time as the House N. Wall 119 of House M was cut off by the wall in question, which, on the other hand, lies over or abuts on the north end of Wall 122. This shows that the terrace was laid out after House M had been demolished. The solidly constructed foundation on Square H 6, which terminates the wall, seems to be connected with the Bath. There are, therefore, reasons to believe that the whole block of buildings, the Bath and House N, were constructed contemporaneously with Wall 133. In this case the space between House N and the wall in question, called Room LXVII, should probably be explained as a street outside House N.

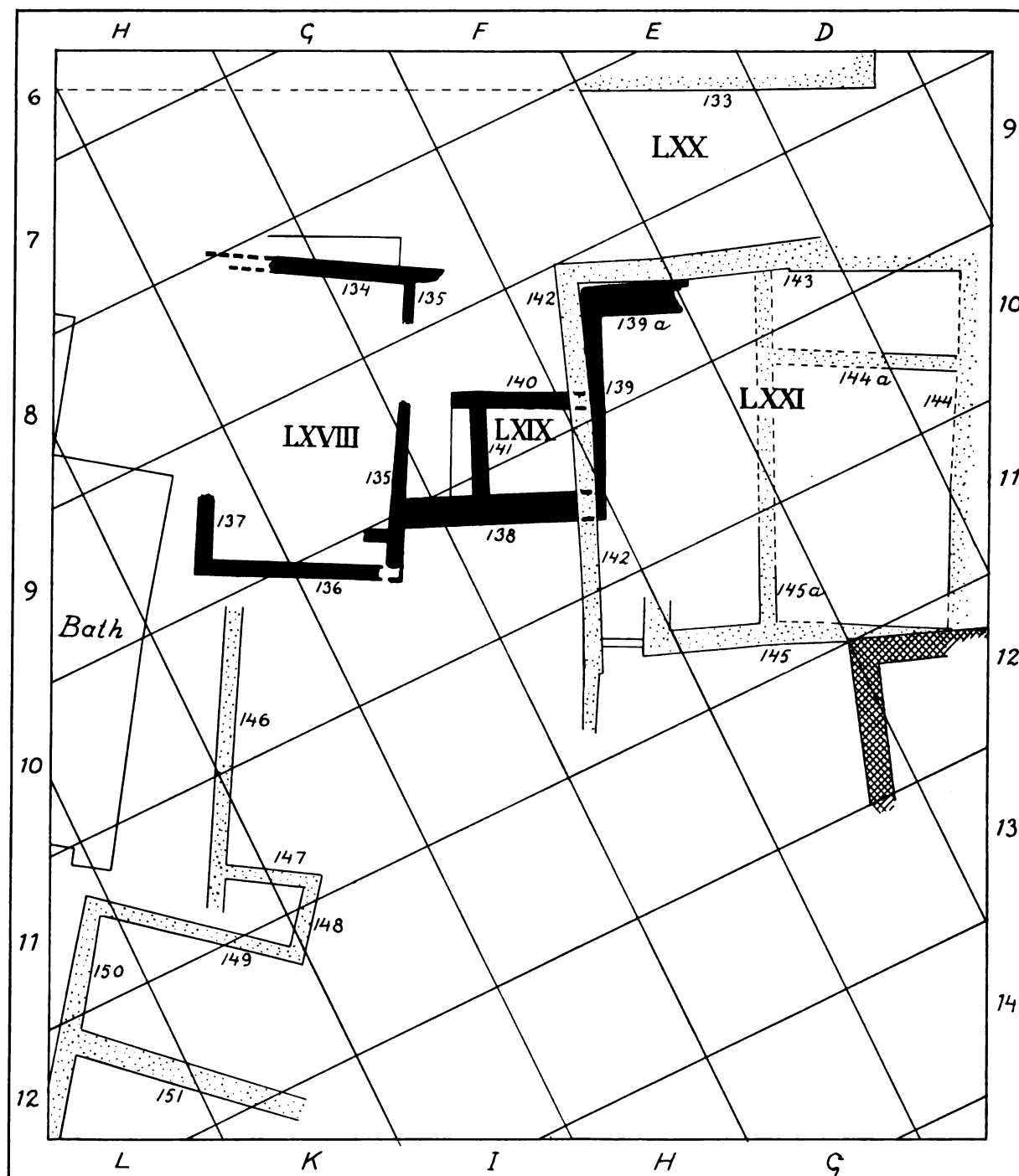


Fig. 63. Analytical plan of Houses O (black) and P (punctated); the hatched wall in Squares E—F 12 is post-Roman in date.



## HOUSE O (fig. 63).

The remains of this house are very fragmentary. Evidently the east portions of it were destroyed in connexion with the construction of the Bath. The remaining walls are generally grouped around two rooms, LXVIII and LXIX. There may have been a continuation of the house further to the west, but this part can be traced only by means of the small piece of Wall 139 a. The entrance into the house may have been on the south side. Here a short wall, just outside Wall 134, can be interpreted as the foundation for a stairway, but this explanation is very uncertain. The purpose of the house could not be determined.

## HOUSE P (fig. 63).

In the same way as House M, superimposed upon House N, was similarly oriented, Houses P and O have practically the same orientation. The part of the house P which remains consists of the outside walls round Room LXXI. Whether there were other adjoining rooms belonging to the same house, remains uncertain. The house was entered from the north through the doorway in the wall-corner 142—145. As far as could be ascertained the square area within the boundary walls was divided into several rooms. Wall 145 a seems to have continued through the whole house. West of it traces of at least one transverse wall can be seen. The concrete floor is comparatively well preserved in the south-west corner, and here some arrangements are visible which may be explained as being intended for an olive oil factory, as in House M.



Fig. 64. Foundations of House P from the east.





Fig. 65. View of the northern parts of the Bath.

#### HOUSE Q (fig. 63).

As this house was excavated only in parts, it could not be ascertained whether it belongs to the Bath or not. In any case, it is certain that the walls were oriented in accordance with this building. Wall 150 is thus aligned with the west wall of the Bath. On the other hand, House Q seems to be connected with the line of upright ashlar blocks (146), which, too, has the same orientation as the Bath. Only two rooms of this house were examined.

#### THE BATH (fig. 44).

As the Bath is dealt with in a special article (p. 105), it will be only briefly mentioned here. The whole building, having been dug out in the previously existing layers, has caused serious damage to the structures buried in them. Large portions of Houses B and K were thus altogether destroyed. The layers of deposit in the vicinity of the Bath are consequently very mixed.

The construction of the walls, being of brick, differs considerably from that of all the other walls. In this respect the structure occupies a position of its own among



the buildings within this shaft. The Bath is oriented in perfect accordance with the rest of the town-plan of the same period (cf. below, p. 90).

### ARCHITECTURAL SYNTHESIS

The analysis of the architecture has shown that various periods can be distinguished by means of the superimposed architectural strata which can be differentiated in the several parts of the excavated area. But it could not be determined by means of this analysis which houses of the various strata should be assigned to one epoch, in other words, how the town-plan appeared in the various periods. Certain results can evidently be obtained in this respect by an examination of the different layout of the houses. It can thus be proved that the houses of the terrace V (Houses A—E) are oriented differently from those of the terrace VI (Houses F—L), though the latter are not all oriented in the same way. Houses M—P and the Bath of the uppermost layer, which extends over both the terraces mentioned, are oriented in accordance with a rectilinear system definitely laid out after another plan. It is worthy of notice that this division of the architectural remains according to the layout of the walls tallies perfectly with the chronological periods to which the houses are dated by the pottery and other finds discovered in association with them (cf. below).

### PERIOD 1

The stratification shows that the house to which Wall 1 belongs is definitely to be separated from all the other buildings examined within the area, not only by imposing layers of deposit below House G but also by a very thick layer of ash and



Fig. 66. Potter's kiln, collapsed.

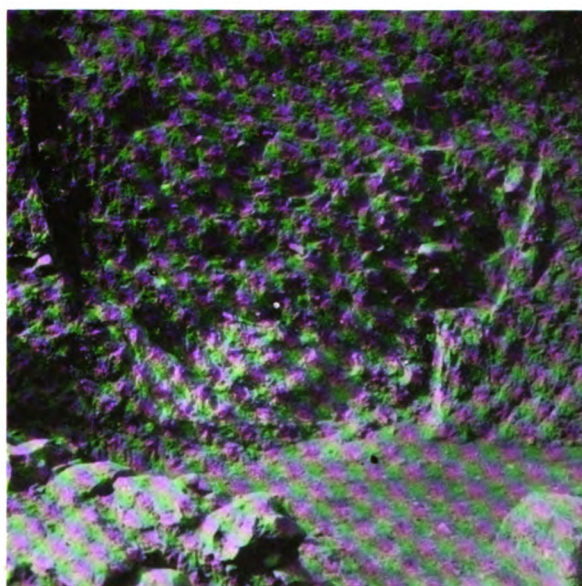


Fig. 67. Stratification in the lime-kiln in Square E 13.



charcoal. Apparently this house was destroyed by violence. The pottery found in association with the house shows that it should be assigned to an earlier period than the other houses (cf. below).

#### PERIOD 2

Further excavation below Houses G and I should certainly uncover other superimposed layers of architecture, which, however, as the operations were restricted in this area, were never examined. In order to find the houses of the corresponding period we have to move up to Terrace V and start with House A. This, as has been shown above, represents the lowest architectural stratum in this part. In view of the indications that Houses B and D must have been more or less contemporary (cf. below), it is necessary, if we search for structures of the same date as House A, to find a house older than House D. As a matter of fact traces of such a building exist. It has been pointed out above that Walls 38 and 39 must be the very scanty remains of a structure which occupied the space before House D was built.

#### PERIOD 3

The structures ascribed to this period are House B and D. Their foundations lie on about the same level and the narrow passage between them seems to supply good proof that the houses were in use contemporaneously. The ground-plan and the disposition of the rooms in House D seem to indicate that this house was used as a dwelling. Its large size and its magnificent situation, on the very edge of the terrace, are striking features, and it may be suggested that the house was the real palace of the period. In this case it is difficult to explain the curious plan of House B, so entirely different from that of House D. Possibly House B, with its narrow corridor-like rooms, is to be regarded as a store-house connected with the large palatial House D.

#### PERIOD 4

The next period is represented by the structures lying over Houses B and D. House E must evidently be assigned to this period, as well as the fragmentary architectural remains (House C) above House A. Possibly Walls 21 and 21 a were constructed during this period, too. Thus we find that the new buildings are still placed on either side of the passage between the old houses B and D. The passage is only prolonged a little to the south-east, and there can be no doubt that the tradition from Period 3 was still remembered.

#### PERIOD 5

The few remains of walls (46—46 c) which were found superimposed on House E, should evidently be assigned to a later period than the house in question, and it is possible that they ought to be dated to Period 5. — But we have to move to the very north part of the trench to examine how the building activity continued after

the large houses F. and C. In the north, too, we are able to distinguish three building periods, which, from the pottery evidence, all belonged to the Late Helladic Period. The first (Period 5) is represented only by House F, which is oriented in much the same way as the houses on Terrace V.

#### PERIOD 6

To this period we are forced to ascribe four houses (G, I, K, and L), lying close to each other, thus occupying quite a large area of the city. All these houses are situated on about the same level. Between Houses G and L on one side, and I and K on the other, there is a clearly defined street which terminates at the west end in a small open space of triangular shape. The street is somewhat curved. Another street comes from the west into the open space mentioned after passing the narrow place, lane or passage XLVII between Rooms XLVI and XLVIII. A third street of rather irregular shape comes from the north, between Houses I and K, and opens on to the curved street. Very probably it was continued in a westerly direction south of House I. In this group of buildings, House G apparently occupies the predominant position. The whole of this city lies at a lower level than the houses on Terrace V, but judging from the pottery and other finds, it must be assigned to later periods.

#### PERIOD 7

In this period the same general town-plan seems to have been used, since the new structure (House H), which was erected on top of House G, follows the same general outline as this. The south boundary wall of House H still follows the outline of the curved street, only the north-west corner of the triangular open place has been cut off by Wall 72. There are no buildings preserved south of the street which could be assigned to this period.

#### PERIOD 8

This period may be passed over here as being of comparatively trifling importance from an architectural point of view. The finds made in connexion with the scattered walls on top of House I force us, however, to assign the walls to a special period, after the destruction of which the site seems to have been abandoned for some time.

#### PERIOD 9

Both the stratigraphical and architectural evidence indicates that quite a long intermediate period must have elapsed between this and the previous periods, though there are no architectural remains which could bridge the gap in the building activity. The period is represented by Houses M and O. It is true that the houses are not constructed on the same level, but evidently on the previously existing, sloping ground. The new town was planned on a rectilinear system with a different orientation than the previous cities on the site. The way the two houses of this period were connected cannot be determined.

## PERIOD 10

Apparently, the same town-plan was used in this period, to which Houses N, P, and Q, and also the Bath belong. The houses N and P are separated by a wide street running in an east—west direction. This was very probably constructed at the same time as the Bath. It may be pointed out as a possibility that the press-house (M) of Period 9 was rebuilt north of the street in Period 10, and that the work was thus simply continued in House P.

Such is the architectural development in the Lower City as established by the stratification and analysis of the architecture. The relative chronology cannot be altered, as may be seen from the preceding pages. As regards the absolute chronology, all the finds, especially the pottery (cf. below) will give adequate reasons for the attribution of the architectural remains to the various epochs of the prehistoric, Hellenistic, and Roman periods.

The arguments for the establishments of this absolute chronology are anticipated in the following diagram which is inserted here in order to facilitate the understanding of the relation between the various epochs and architectural strata: —

Period 1	House of Wall 1		Early Helladic
Period 2	House A; Possibly Walls 38—39	A	Middle Helladic
* 3	Houses B and D	B	
* 4	Houses E and C	C	
Period 5	House F; Possibly Walls 45—46 c.	A	Late Helladic III
* 6	Houses G, I, K, L	B	
* 7	House H	C	
Period 8	Walls 106—111		Geometric
Period 9	Houses M and O		Hellenistic
Period 10	Houses N, P, Q, and the Bath		Roman



## THE TRENCH ON TERRACE III

## ARCHITECTURAL ELEMENTS

*Walls (fig. 68).*

*Walls 1—5.* These walls are laid on the bedrock and consist of comparatively large undressed stones, without any mortar. Walls 1 and 3 are very carelessly constructed just above a cutting in the rock. Wall 22 is characterized by its curved outline and regular construction; along its south facade there is a line of smaller stones. Walls 4 and 5 are cross walls to Wall 2, and seem to have been bonded with the adjoining walls.

*Walls 6—8.* These seem to be the only remains of a building with rectilinear walls, similar in construction to those described above. Only fragments of the walls are preserved. They rest directly on the rock.

*Walls 9—15.* These walls are bonded with each other, so that they form a closed building, with the exception of Wall 14, which abuts on Walls 9 and 11. Wall 13 is a continuation of Wall 9, though not bonded in with it. Wall 10, and the southernmost parts of Walls 9, 11, and 15 rest on bedrock, while the rest of the walls are placed on a layer of debris. The walls consist of irregular rubble masonry laid in several courses and are not bonded with other adjoining walls.

*Walls 16—17.* The purpose of these walls is doubtful. They run both in the same direction, but neither of them seems to be preserved completely. Walls 17 and 17 a are partly superimposed on Wall 9 but their foundations lie on about the same level with it. Wall 16 is partly superimposed on the curved part of Wall 2. This wall, too, consists of two parts running close together or parallel.

*Walls 18—20.* These walls are bonded in with each other and form a room closed on three sides. The south part of the room was not examined. The walls rest on debris and lie above part of Wall 10. Walls 18 and 20 are cut off by Wall 24.

*Walls 21—23.* These walls are very similar to the previous ones, but are situated at a much higher level. Their construction is not very solid. Walls 21 and 22 are bonded together. These walls, too, are cut off by —

*Wall 24* which is a mere terrace-wall the purpose of which is to hold up the earth on Terrace II.

*Floors.*

The floors of the rooms on this terrace consist of mere rammed earth and clay. It is very clearly distinguished in House R where it follows the levelled bedrock. In House T, the floor was more difficult to distinguish from the earth but its original level could be ascertained with the aid of a kind of rock on the inside of Wall 9, and the level on which Wall 14 was built. The floors of Houses U and W likewise consisted of rammed earth.

*Bothroi.*

West of House R, were found seven cylindrical pits, so-called bothroi, excavated in the bedrock and placed rather irregularly. As far as could be ascertained they had no connexion with the buildings erected above them. The bothroi must have been used and closed prior to the building of House T. The size of the bothroi varied from 0.80 m to 1.80 m in diam.

## ARCHITECTURAL ANALYSIS

A glance at the plan (fig. 68) will be sufficient to show that different buildings are constructed on the terrace. Walls 1—5 and Walls 9—15 must belong to separate houses. Apart from these, Walls 6—8, also built directly on the bedrock, are differently oriented, and may therefore represent a third structure. Furthermore, Walls 16—17 are superimposed on the two former houses, and must therefore be assigned to a later period. The wall systems 18—20, and 21—23 must for the same reasons represent still later, and different, epochs.

## HOUSE R (fig. 69).

This house consists of three rooms lying one behind the other. The eastern part of the house is built in a shallow cutting in the rock so as to level the floor. Rooms I and II are rectangular in shape, while Room III has an apsidal wall with gently

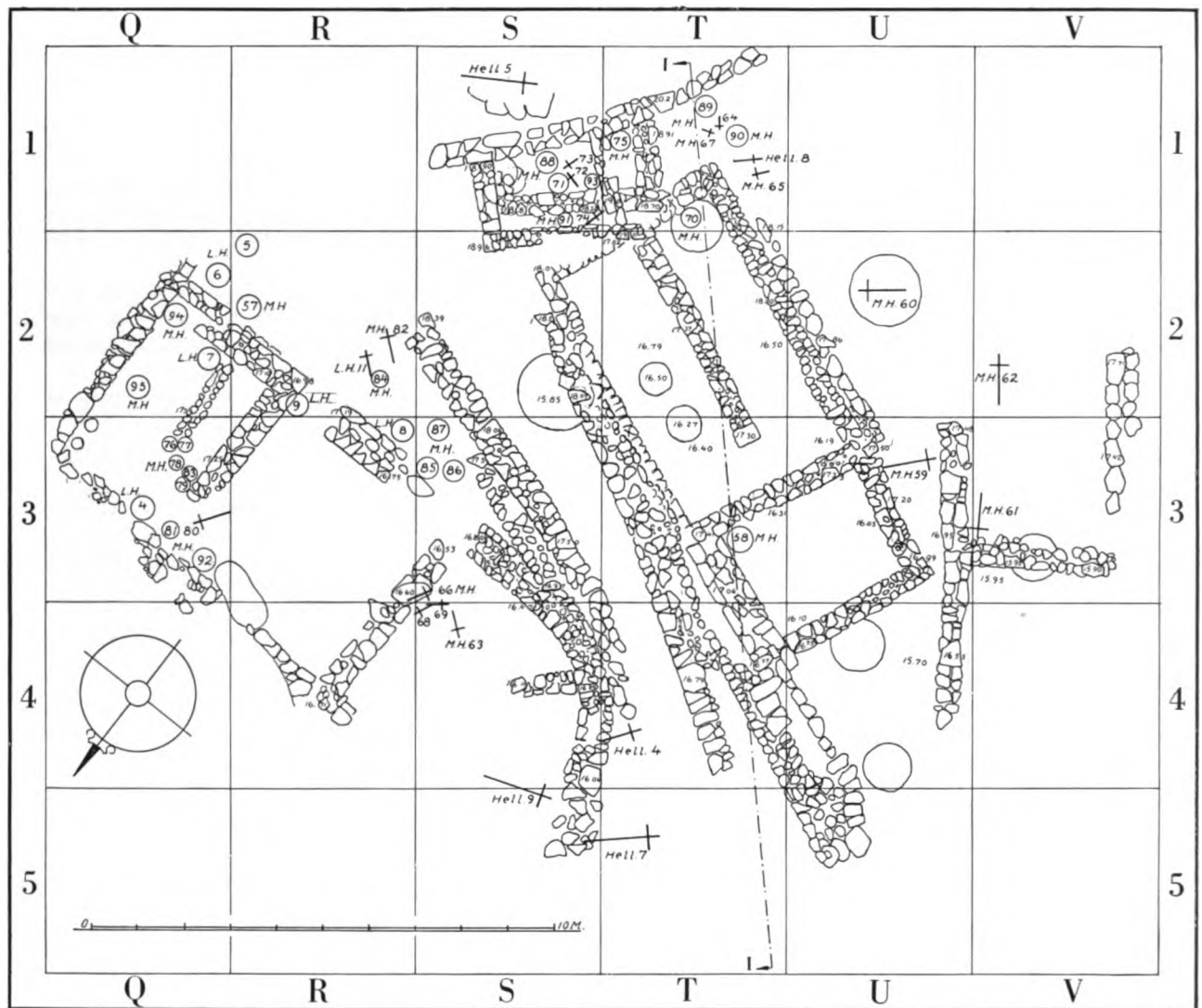


Fig. 68. Plan of the small trench on Terrace III of the Lower City.

curved outline. It is difficult to determine how the house was entered. There may have been a doorway from the north into Room III. A break in the wall on the south side may indicate that the house was also entered from that side. Short pieces of wall in Rooms I and III show that these rooms were divided into smaller compartments. Communications between Rooms I and II was effected by a doorway through Wall 4, near Wall 3. There is no sign of a doorway between Rooms II and III.

#### HOUSE S (fig. 69).

The remains of this house are very fragmentary. Parts of two rooms only are distinguishable, arranged on a rectilinear system. The original shape of the house cannot be ascertained, nor the entrance into it determined.

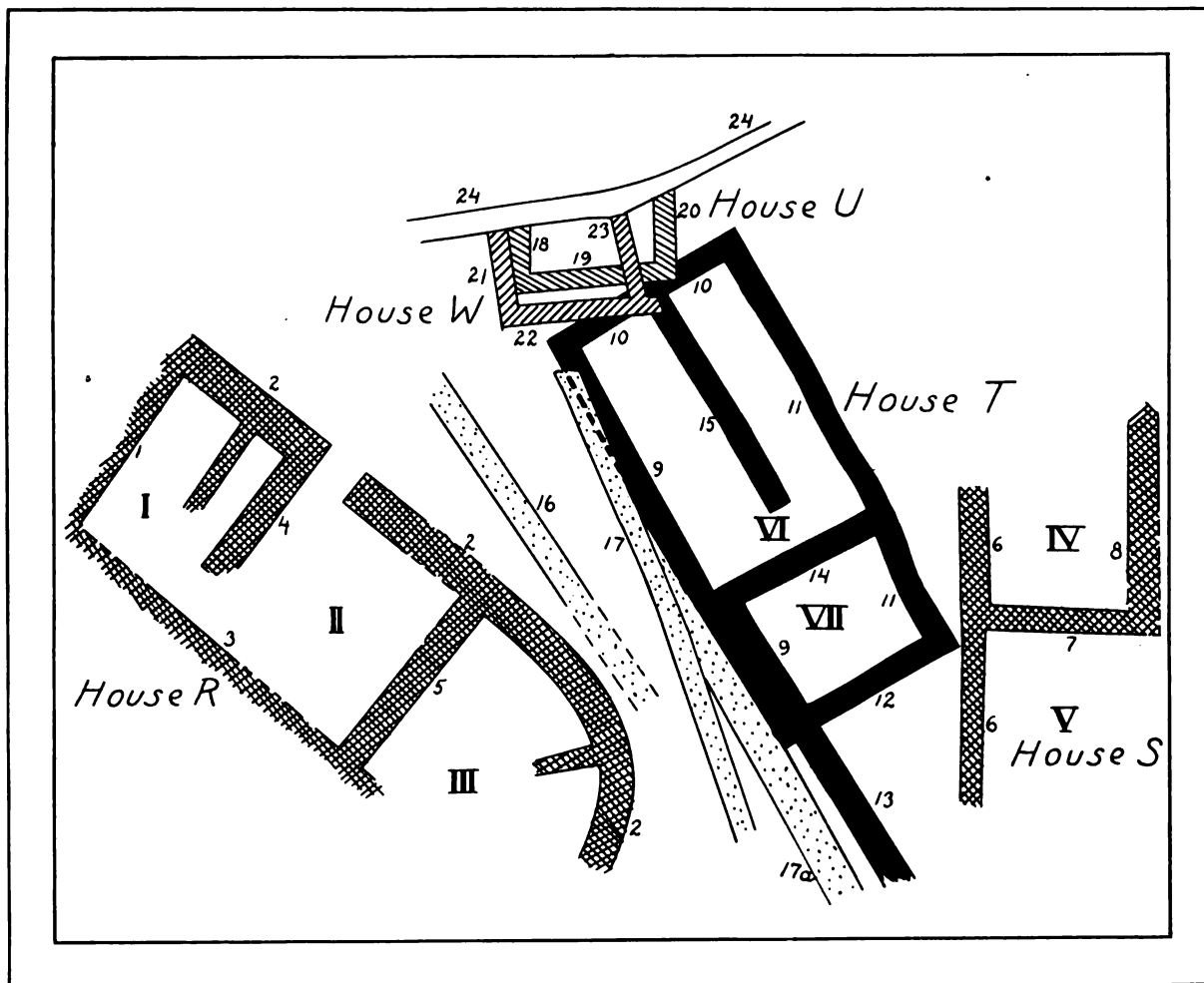


Fig. 69. Analytical plan of the small trench on Terrace III.

#### HOUSE T (fig. 69).

The foundations of this house seem to be very well preserved. The ground plan is very regular, showing one minor room (VII), square in shape, joined with a large one of rectangular shape (VI), the latter being divided into two compartments by a wall in the longitudinal axis of the house. There may have been a kind of vestibule added north of Room VII. There was nothing to indicate how the house was entered.

#### HOUSE U (fig. 69).

The only section of this house which has been examined is a part of one room enclosed by rectilinear walls. The house may continue to the west and south.

#### HOUSE W (fig. 69).

This house repeats the arrangement of the previous house, and no more of it has been examined than the north part of one room. Both these houses (U and W) have been damaged by Wall 24 which must be a later construction.





Fig. 70. Foundations of House R from the east.

## ARCHITECTURAL SYNTHESIS

### PERIOD 1

On summing up the results of the analysis it becomes clear that Houses R and S are the earliest structures on this terrace. This was confirmed by the finds, too, as well as by numerous tombs which had been excavated in the debris of these bottom layers (cf. below, p. 123). In this period, too, the *bothroi* must have been used and filled up with rubbish.

### PERIOD 2

The next period of building activity is marked by House T, in the erection of which House S was partly damaged and removed.

### PERIOD 3

At a somewhat later stage of the same period Walls 16 and 17 were constructed, probably before House T was entirely destroyed.



## PERIOD 4

This period is marked by the construction of House U which is partly superimposed on House T, and must therefore have been constructed after that house was demolished. Evidently the ground level must have risen considerably since the construction of House T.

## PERIOD 5

House W was constructed during this period, apparently after House U was destroyed, as its walls rest on top of the remaining foundations of that house.

Walls 24 may be of a much later period.

Anticipating the arguments for the attribution of the houses to certain periods (cf. above, p. 90), the following diagram shows the development of building activity on Terrace III:



Fig. 71. Foundations of House R from the east.

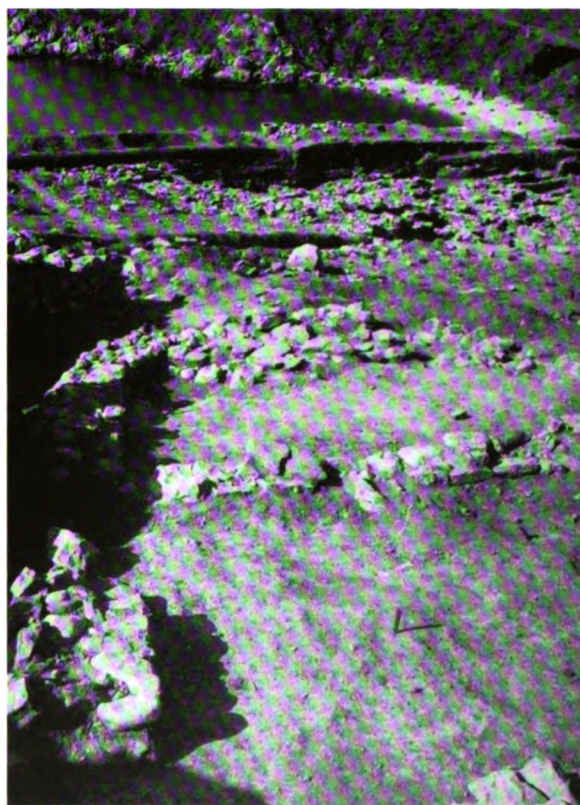


Fig. 72. Foundations of House R from the east.

Period 1	Houses R and S		Early Helladic
Period 2	House T	A	Middle Helladic
• 3	Walls 16—17	B	
• 4	House U	C	
Period 5	House W		Late Helladic

### STRATIFICATION

It must be pointed out that on the large section through the whole of the Lower City (fig. 77) the strata indicated do not represent the actual layers in the way they appeared in the side of the trench. The various markings show the chronological strata as far as they could be ascertained after a careful study of the finds and the pottery discovered in them. This is, of course, not the ideal way of indicating the stratification in a section. In large areas in the larger trench, however, the conditions were very difficult to determine, owing to the disturbances caused by the construction of later buildings whose foundations had been sunk into the layers beneath. Other disturbances, which have entirely spoilt the original stratification over vast areas, were caused by the numerous tombs excavated in the deposit.

These circumstances on many occasions made the architectural analysis extremely difficult.

### THE LARGE SECTION

The section which runs through the whole of the Lower City below the northern slope of the acropolis is marked on the architectural plan. In order to facilitate the description of the section it is here divided into eleven sectors, each 10 m long and numbered from left to right A—L. At about the middle of sector D, the section describes an angle and another angle is found in sector F (cf. figs. 42—44, 68).

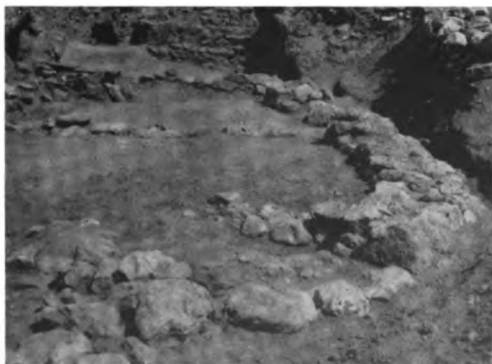


Fig. 73. Foundations of House R from the west.



Fig. 74. Foundations of House T from the north-west.





Fig. 75. Foundations of House T from the south-east.



Fig. 76. Foundations of House T from the south-east.

*Part A.* The surface here lies at about a level of 8.80, while the bedrock, uncovered in the small trench in Square G 14, was found at 2.60. The deposit is thus about 6.20 m deep.

In the deep trench in Square G 14, a thick layer of E. H. date was found directly above the bedrock. In this layer Wall 1 was found. At level 3.50, this rather homogeneous layer was interrupted by a stratum, about 20 cm thick, containing plenty of charcoal and ash and mingled with small stones. Above this stratum, there seems to have been a second building level, also E. H. in date. No wall in a state of preservation was met with in the trench but several rough blocks at level 3.75—4.15 may indicate that a wall had been destroyed here. The stones at level 4.15—4.20 may also be explained as a kind of pavement or flooring. This is evidently the floor of the second E.H. dwelling, above that of Wall 1. On the floor in question, at level 4.15—4.90 the debris of the collapsed dwelling was found, containing, amid plenty of charcoal, large pieces of mud-bricks, roofing-tiles, and potsherds. The M. H. deposit was found at level 4.90—6.30. This stratum is rather homogeneous in consistency, and contained two earth-cut tombs (cf. below, p. 127 f.). The L. H. stratum was encountered at level 6.30 where a house floor composed of pebbles could be distinguished. The layer above, the floor contained L. H. potsherds.

The Mycenaean deposit was found at level 6.30 and extended up to about 7.50 and within this accumulation at least four strata were distinguished (the floor stratum

at level 6.30 + the three building-strata, Periods 5—7, p. 89). Evidently the stratum immediately below House G corresponds to the period of House F, which, however, was not traversed by the section. Walls 53 and 56 of House G are visible in the section, found at about level 6.90. — Above the Mycenaean strata a layer of earth was found, containing Hellenistic potsherds but no dwellings from that period. — The dark surface layer was unusually thick in this part, about 0.40 m.

*Part B.* The deeper layers of Part A certainly continued in Part B, too, but they were not excavated. The excavation was restricted to the floor of the House G which was found at level 6.98 (the column-base in Square G 13). This floor was covered with grey earth up to level 7.15 on which House H rested. Walls 71 and 74 are visible in the section and it is also clear that Wall 59 of House G had been levelled in order to make room for the floor of Room XXXVII. The debris on the floors of House H was of the same kind as that found between levels 7.15 and 7.30, above Room XXXII. Between this layer and the surface layer, containing mostly Roman pottery, there intrudes, south of Wall 74, a layer which must be ascribed to the Geometric period, as all the pottery found there was Geometric. It varied in thickness from 0.10 m to 0.25 m, and was found at level 7.35—8.00 running above Wall 71. This layer terminated at about the middle of Part C of the section.

*Part C.* No differentiation could be noticed in the Mycenaean stratum in this part. In the northern part it was followed immediately by the Geometric stratum described above. In the south, however, a pure Roman stratum lay directly above the Mycenaean one. Walls 90 and 92 of House K are intersected by the section but no other walls are visible within this part.

*Part D.* The same stratification continued here, but towards the south the disturbances caused by the Bath are clearly visible in the earth. The Hellenistic deposit extends to a depth of about level 9.50. The various walls belonging to the Bath are crossed by the section: 102, 101, 100 (possibly of Mycenaean date), and a wall belonging to the room in front of the hypocaust. — At about the middle of this part the section describes an angle.

*Part E.* The same stratification continues as far as a niche which belongs to the Bath, but south of this the strata are quite different. Here we find no Mycenaean deposit. Below the thin surface-layer follows a comparatively unimportant stratum, containing mostly Hellenistic potsherds. This layer was found at level 11.80—12.00. Below 11.80 the deposit is purely M. H., in the most southerly part extending to bedrock, which was found at level 10.10. Walls 12, 11, 10, and 7 of House B are crossed by the section and, furthermore, Wall 3 of House A, resting directly on the bedrock.

*Part F.* The south walls of Houses A and B are visible in this part of the section, where Walls 6 and 21 are intersected. Several other walls were also dug over, but as they were never entirely excavated they will be omitted from the description and simply marked on the drawing. Still, it is worth noting that a thin L. II. layer intrudes

at level 11.50—12.75, between the M. H. and Roman strata. Above the Hellenistic deposit, the dark surface-layer thickens considerably in the middle of Part F. The solid bedrock is found sloping to a depth of about 2 m from the surface.

*Part G.* The same stratification continues in this part and all the layers of the previous part are also found here, though all of them are much thinner as the earth is rather scanty. At the middle, the depth does not exceed 0.75 m. A couple of walls founded on the bedrock are crossed by the trench. In the south a thin E. H. layer appeared resting on the bedrock.

*Part H.* The bedrock here slopes rapidly from level 13.30 in the north to 16.50 in the middle and south. The E. H. deposit from Part G, on the bedrock, continues for about a metre to Wall 17 a on Terrace III. The same layer is met with again between Walls 14 and 15. Above this layer a thick M. H. deposit is found extending up to the surface. The walls of House T all rest on the bedrock.

*Part I.* In this part the layers of deposit increase to a depth of 3 metres. The rock slopes rather steeply. The level is thus 16.50 in the north but about 19.75 in the south. Two bothroi are traversed by the section (Nos. 1 and 5). In No. 5, the bottom stratum belonged to the E. H. period while the higher strata in it, and the layer on the bedrock, could be dated to the M. H. period. Above, and south of Wall 10, belonging to House T, a layer containing L. H. potsherds was found at level 18.50—19.50 the measurement being taken at the thickest part. The layer is of small extent and may have some connexion with House W, not visible in the section. The whole is covered by the Hellenistic stratum and the dark surface layer. Two walls (No. 24 and a simple retaining terrace-wall) are clearly to be ascribed to the Hellenistic layer. Another stout wall just north of Bothros 1, resting on the bedrock, was never entirely excavated. It should most probably be assigned to the E. H. or possibly to the M. H. period.

*Part K.* In this part the stratification of Part I continues. Only in the most southerly part, on the bedrock, a very thin strip of E. H. deposit was observed. Most of the rock was covered with M. H. deposit, on top of which the Hellenistic layer was found. Several tombs appeared in the trench in the M. H. layer (cf. p. 126 f.). Other tombs were found in the Hellenistic layer (cf. p. 140 f.). In the northern part a rubble wall appeared, evidently belonging to the M. H. layer. Another wall with a different orientation is clearly to be ascribed to the Hellenistic period, as it rests on the M. H. layer.

*Part L.* This part, which is situated just below the perpendicular rock-wall of the acropolis, is characterized by a clear stratification of the E. H. and M. H. layers. The Hellenistic stratum, about 1.50 m thick, rested immediately on top of the M. H. stratum. The bedrock was reached slightly below level 22.00. Wall-systems of two periods were distinguished, one belonging to the M. H. and the other to the Hellenistic period, evidently corresponding to the building periods discovered in Part K. Near the vertical acropolis rock in the south, some large blocks of rock can be seen in the debris. They have apparently fallen from above.



This large section does not of course show the stratification in all parts of the excavated area but in general it shows very clearly during which periods the various parts of the area were inhabited. On summing up the results we find that the E. H. settlement, the oldest found, was confined to the lowest strata on Terraces I, II, III (though only slightly visible in the section), and VI. On Terrace VI a heavy layer was found in the trench in Square G 14. Evidently the M. H. city is situated below the L. H. city, represented by the excavated houses F—L. On Terrace V the M. H. strata were found directly on the bedrock. If there had been any E. H. settlement on this terrace, all traces of it were washed away before the area was inhabited in the M. H. period. On Terraces II and III, the M. H. layers constitute the bulk of the deposit, while, on Terrace IV, it is confined to rather thin strips. — The L. H. settlement seems to have been concentrated chiefly in the lowest part of the area investigated, at least three different building periods being distinguished there. The L. H. stratum probably covered the whole of Terrace VI. Other thin layers of L. H. deposit are found on Terrace IV (Part F) and on Terraces II and III (Part I). — The Geometric stratum is visible in the section as a layer between Walls 74 and 90 in Parts B—C. This is the only site where layers were found which could be described as pure Geometric. — Nor are the Archaic and Classic periods represented by deposit or architectural remains, which indicates that the site was not inhabited in these periods, in so far as conclusions can be drawn from the evidence obtained. — The Hellenistic remains are however considerable and extensive. The numerous remains of Hellenistic houses on Terrace VI are however not represented in the section. In the construction of the Roman Bath practically all the Hellenistic strata — if they once existed — must have been removed. South of the Bath, in Parts E—F some walls are preserved but it could not be ascertained with any certainty whether they should be assigned to the Hellenistic or the Roman period. The pure Hellenistic stratum begins in the section on Terrace IV and extends up to Terrace I, where also several architectural remains and tombs, etc. are found, which must be assigned to that period. — The Roman strata, finally, are located on Terrace VI and especially in the vicinity of the Roman Bath. As far as the stratigraphical evidence shows there must have been an intermediate period between the Hellenistic and Roman cities at Asine. The stratigraphical evidence tallies well with the literary evidence (p. 16) in this respect and with the finds. No finds of the early Roman period have been found at Asine.

### NOTES OF SOME OF THE BUILDING-TYPES

Remains of three E. H. houses were discovered in the Lower City of Asine, Houses R and S on Terrace III, and the house to which Wall 1 belongs (Square G 14). As House S is too much destroyed to allow of any certain reconstruction it may be left out of this discussion. As to the other two houses, it is remarkable that both are

provided with a curved wall. House R (fig. 69) in this way shows a striking resemblance to House F in Korakou, dating, from M. H.<sup>1</sup> Here, too, we meet with a comparatively narrow building containing three rooms one behind the other. In Korakou the entrance could be located to one short side, whereas the Asine house had the entrance on the long side, into the central room. The situation of the entrance does not change the general plan of the house which certainly should be looked upon as a prototype of the later megaron buildings, as Blegen has pointed out.<sup>2</sup> The megaron house, frequently represented both in Korakou<sup>3</sup> and Zygouries, though on the latter site by houses of simpler and more modest shape<sup>4</sup> is otherwise not represented at Asine in the same pure form. No palace of the megaron type like those in Tiryns, Mycenae, Phylakopi, and other places was found. It must, however, be pointed out that in some houses with a more complicated plan the megaron arrangement is easily distinguished as the dominant, central part around which the other rooms are grouped. The early megaron structures at Asine and Korakou are interesting as they clearly show that this type of house was known in southern Greece already in E. H. time (House R and possibly House S in Asine) and that the building-tradition, in spite of the now well known cultural break between E. H. and M. H., must have lived from the E. H. period through the M. H. (House F in Korakou), to the L. H. period (House H, L, and O in Korakou). The megaron structures of Anatolia and northern Greece constitute the natural prototypes for the megara in the Peloponnese and southern Greece during the L. H. period. The E. H. megaron at Asine is therefore a new and very welcome link in the series which connects the early and late types, especially as it is so closely related to the somewhat later megaron at Korakou (House F).<sup>5</sup> The series of houses from Asine and Korakou, mentioned here, indicates furthermore that the typical *ante*-arrangement is not found in the earlier representatives of the series but seems to be characteristic of the L. H. III period in Korakou (Houses H, L, and O). At Asine, however, there are several houses which must be referred to the L. H. III period, but none of them shows the megaron-type with *ante*-arrangement.

The M. H. house E at Asine (fig. 49) is rather peculiar in shape. The parts of the house which remain resemble two megaron buildings close to each other, both using the same longitudinal wall. The present state of the remains and their resemblance with megaron-structures like those mentioned above may be merely accidental.

The termination of the house in the west is, of course, conjectural. The house may have been shut off by means of a transverse wall. In this case the house would show a rather close resemblance to some of the houses at Phylakopi. A house in Square J

<sup>1</sup> Blegen, C. W., Korakou, a prehistoric settlement near Corinth, Boston 1921, p. 76, fig. 110.

<sup>2</sup> Blegen, Korakou, p. 78.

<sup>3</sup> Blegen, Korakou, Houses L, H, and O; figs. 112, 121, and 123.

<sup>4</sup> Blegen, Zygouries, a prehistoric settlement in the valley of Cleone, Cambridge Mass. 1928, House A, D, and U; figs. 5, 7, and 22.

<sup>5</sup> Blegen, Korakou, fig. 112.

2 at Phylakopi,<sup>1</sup> of Period II has four rooms grouped very much in the same way as in our house E at Asine, and in both cases we are confronted by two narrow-fronted rooms connected with two wide-fronted (Phylakopi) or square (Asine) rooms. The arrangement with one or two narrow-fronted rooms connected with, usually, one wide-fronted room seems to be a greatly varied type of house during the M. H. period. At Phylakopi it is represented by a series of houses from the first period (a house in Square J 2)<sup>2</sup> and the second period.<sup>3</sup> The house in Square J 3<sup>4</sup> of the third period is simpler in type and may be connected with the typical L. H. megara of the Greek mainland; though the *ante*-arrangement is missing in the Phylakopi house. This simple type is found in Zygouries, too (Houses A, D and, though slightly irregular, House U).<sup>5</sup> House S in Zygouries should probably also be referred to this group, though it is still more irregular. As far as can be seen it was planned together with House W close by, so that both houses form a closed block, enclosing a peculiar porch (Room 40) which reminds one of the *liwans* of the East.<sup>6</sup> The same may be said of the central room 24 of House W at Zygouries which occupies the same position as the Oriental *liwan* with the lateral rooms.<sup>7</sup>

House T at Asine (fig 69) is a very good example of the arrangement with two parallel rooms alongside each other in association with a third room which occupies the whole width of the building. A house in Phylakopi<sup>8</sup> is practically identical with that at Asine, only the doorway between the two narrow rooms being situated close to the transverse wall in the Asine house, whereas it is close to the entrance on the short side of the house in the Phylakopi structure. Another house in Phylakopi<sup>9</sup> has one of the two narrow-fronted rooms divided into two very small ones. There is still a possibility that House A at Asine (fig. 47) has to be referred to this type. The house was very much destroyed and the excavation was not continued in the north-east side so that there may be another room here like that in House T (fig. 69).

In the preceding we have dealt with some of the houses at Asine which show a more or less typical megaron-arrangement of the rooms or similar houses of a very simple plan. There remain, however, two houses of the M. H. period which display a rather complicated plan with many peculiar and characteristic features. The complicated plan of the M. H. house D at Asine deserves a further analysis. The three main portions of the house have already been pointed out. The big room (XX) is

<sup>1</sup> Excavations at Phylakopi, 1904, fig. 31.

<sup>2</sup> Excavations at Phylakopi, fig. 24.

<sup>3</sup> Excavations at Phylakopi, figs. 27, 31, 32, 37, etc.

<sup>4</sup> Excavations at Phylakopi, fig. 48.

<sup>5</sup> Blegen, Zygouries, figs. 5, 7, and 22.

<sup>6</sup> Blegen, Zygouries, fig. 14.

<sup>7</sup> As E. Gjerstad has pointed out the *liwan* is found in the East already in prehistoric times, as in the M. C. house at Kalopsida, Gjerstad, Studies on prehistoric Cyprus, Uppsala 1926, fig. 3; Cf. Gjerstad, Corolla Archaeologica, Lund 1932, p. 161.

<sup>8</sup> Excavations at Phylakopi, fig. 34.

<sup>9</sup> Excavations at Phylakopi, fig. 37.



provided with a small vestibule (XXI) with *ante*-arrangement the same as in the later houses at Korakou, but this megaron-like complex is here enclosed in a larger building with a clear front in the direction of the *ante*. We see in this arrangement very much the same plan as in the later places of L. H. time, e. g. the palace of Tiryns or perhaps a still closer analogy to the palace at Phylakopi of the third period.<sup>1</sup> In the Mycenaean palaces the megaron is also to a certain degree incorporated in, and built together with, the surrounding structures, though often separated from these by means of narrow passages. There is often a tendency to divide the plan into two compartments, supposed to have been used by the females and the males. The same tendency is noted in the Asine house D where a wall divides the house lengthwise. The megaron complex (Rooms XX and XXI) constitutes one part of the house entirely separated from the rest. The row of square rooms behind these two main parts of the structure has good parallels in the rooms which often surround the megara of the Mycenaean palaces, as do the two large rooms at the rear of the house. The resemblance between this house D and the somewhat later structure E (fig. 49), which apparently replaced the old building, may be emphasized. In both cases we note the lengthwise division of the house, a feature which, as we have seen in the preceding, is characteristic of many of the minor houses of the M. H. period both on the Greek mainland and on the Cyclades.

The accentuation of the front is very clear in House D at Asine and it is this characteristic which especially connects the house with the Mycenaean megara. It is therefore rather surprising that this feature is hardly recognizable in House I, the plan of which otherwise, as has been pointed out above has so much in common with House D: the large, rectangular, central room (XLVI) with an adjoining narrow room (XLV), the row of small chambers (XLII—XLIV) and, which seems to be likely, large rooms at the rear (XL). One would rather expect to find a pronounced frontality in this house which dates from a period during which this feature is more or less the rule in the houses of the Greek mainland.

The M. H. house B at Asine (fig. 47) differs very much from the other houses of the Lower City. The northern portions of the house were destroyed but most likely a very small part only is missing; and on the whole this cannot have changed the general character of the structure. The two most striking features in the house are the long, narrow rooms in the interior, and the peculiar apsidal wall in the west. Similar features are more or less to be found in the well known oval house at Chamesi in Crete. The Asine house is, however, different in many respects: the rooms run like narrow strips straight across the Asine house, while the walls in the Chamesi house radiate from the centre. The regular, oval shape of the Chamesi house is also quite different from the very irregular house at Asine.<sup>2</sup> It has been pointed out above (p. 88) that the peculiar

<sup>1</sup> Excavations at Phylakopi, fig. 49.

<sup>2</sup> Houses with oval walls or even oval plans are not rare on the Greek mainland. Cf. Bulle, Orchomenos, p. 47 ff.; Fimmen, Kretisch-Mykenische Kultur, p. 41 ff.; Goldman, Eutresis, p. 33. ff.

division of the house into narrow rooms may be explained by the purpose which the house served. It must for stratigraphical reasons have existed contemporaneously with House D, the paramount house or «palace» of the period. The narrow, corridor-like rooms in House B may indicate that we here have a store-house belonging to the «palace». The whole complex of Houses B and D should thus be looked upon as one unit. The store-rooms occupy a very important position in all Aegean palaces. In Asine the two compartments are separated into different buildings, but placed close together.

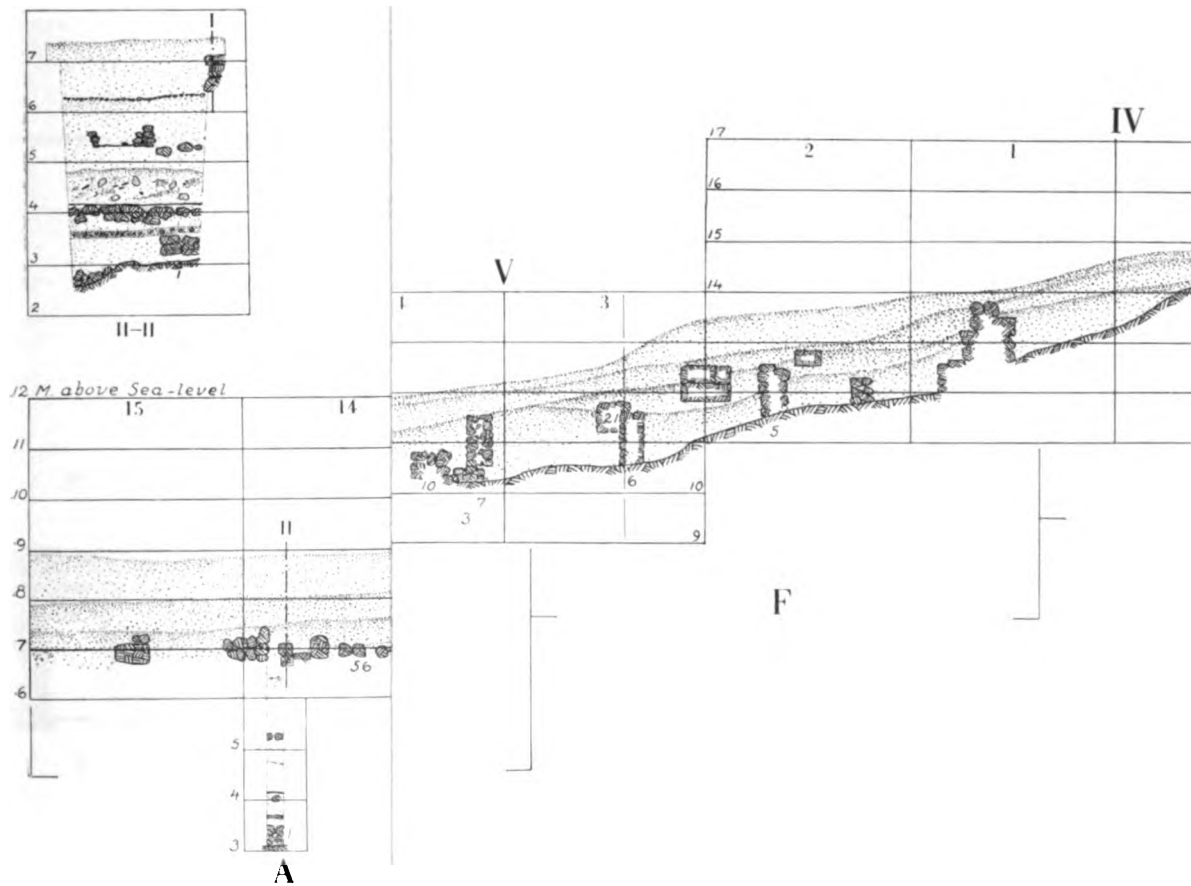
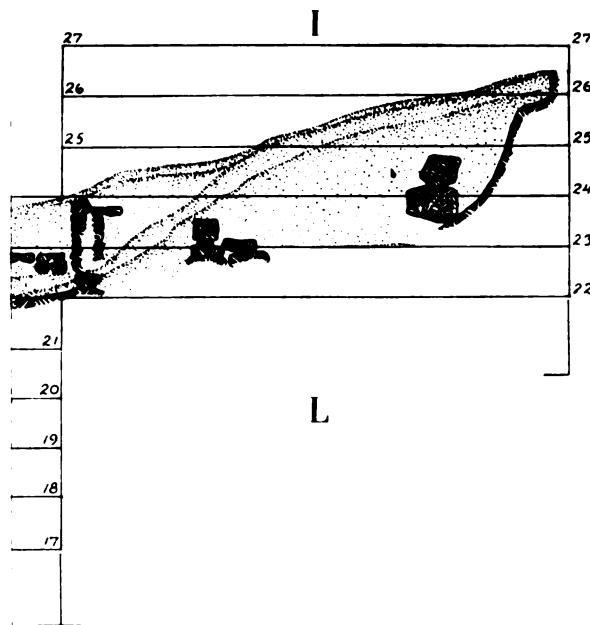
Unfortunately, the houses of the L. H. III period at Asine were in a poor state of preservation, owing to the later building activity on the site which had caused considerable damage to the lower strata. The remains preserved show, however, that the houses had a rather complicated plan and in one case (House I) the influence from the previous local building tradition is very evident (cf. above). Apart from House I, the most important building of the period, was House G, which could unfortunately not be entirely excavated. The portions laid bare show, however, a comparatively elaborate and complicated plan. It is not quite certain whether the rooms of the house were grouped around a courtyard of any kind like some of the more complicated houses at Zygouries<sup>1</sup> and Korakou.<sup>2</sup> The hypostyle room (XXXII) occupies a dominant position within the complex. The arrangement with two small narrow rooms close to a larger one is often found in Mycenaean architecture. They might perhaps be explained as light-wells in the middle of the house. As to the adjoining rooms, too little is preserved for any safe comparisons. Regarding the previously discussed houses of Asine, it is worth noticing that these could easily be distinguished as free buildings whose outlines could be followed, while House G may have been built together with other structures of the Lower City, so that the original outlines of the house are now hardly distinguishable. This large house of the L. H. III period was destroyed and replaced by House H, which must belong to the very end of the period. We note here very similar characteristics. The hypostyle room is situated farther to the east (XXXIX); close to this room there is a block of rooms which in their present state very much remind us of a megaron arrangement but which in their original, complete plan may have had quite a different appearance. This house, too, may have been connected with other structures in the Lower City in some way or other.

We have thus the following main types of pre-historic houses in the Lower City of Asine:

1. The narrow megaron house without ante; with one apsidal wall (E. H.).
2. The narrow house of «Phylakopi type» (M. II.).

<sup>1</sup> Blegen, Zygouries, Houses L and Y, furthermore «the house of the pithoi» and «the potter's shop».

<sup>2</sup> Blegen, Korakou, (fig. 114) House P, with its peculiar plan.

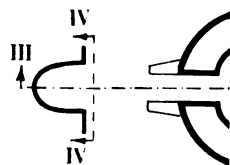




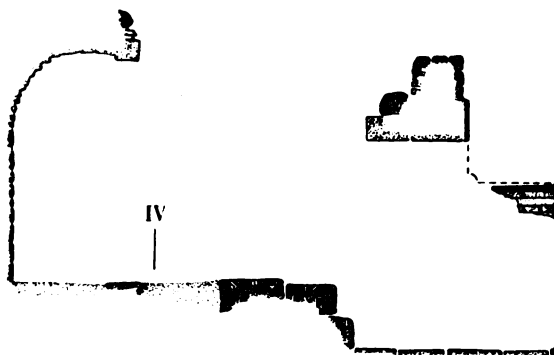




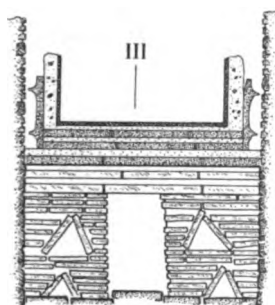
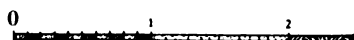
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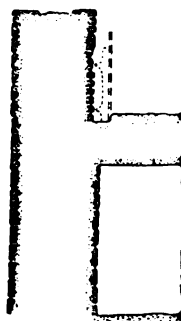
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III



V







3. The house with a complicated plan with rooms grouped around a central megaron with ante; separate store-house (M. H.).
4. The house with a complicated plan with minor rooms grouped around a large, central room (L. H. III).

#### 4. THE ROMAN BATH

BY HOLGER ARBMAN

The Roman bath is here dealt with separately because it is the only remains from this epoch which have been preserved to a sufficiently large extent to give an idea of the planning manner of construction, etc.

The establishment was planned on the simplest lines, »Reihentyp», with all the rooms arranged in a straight line and connected with each other. The sequence is, running from N.: *apodyterium* (A), *frigidarium*, (F), *tepidarium* (T), a smaller intermediate room (Room I), *caldarium* (C). To this must be added, south of the caldarium, an outbuilding which is connected with the *hypocaust*, and some side-rooms.

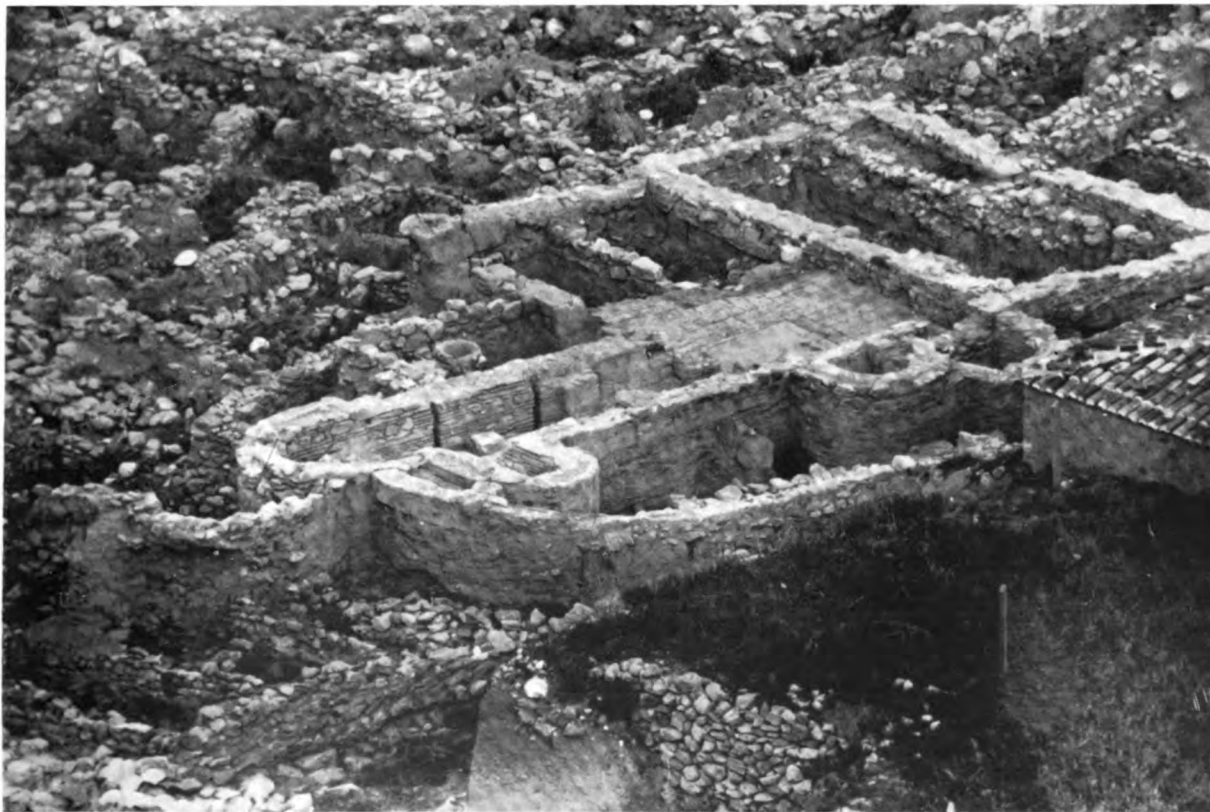


Fig. 79. View of the Roman Bath in the Lower City from S.E.



Fig. 80. The frigidarium from the west.

A is a rectangular room,  $4 \times 7.5$  m only the lower parts of whose walls remain. They are built entirely of limestone and with mortar. The floor has been broken away. Along the eastern side of A runs a narrow, corridor-like room, 0.75 m in width and 3.75 m in length (inside measurements). Its transverse wall passes 1 m from A's north wall, and the walls are not bonded with those of A. In its present condition its upper surface is 0.2—0.4 m lower than the walls of A. Blocks of soft limestone form part of the walls.

F is of the same length as A, separated from the latter by a transverse wall, 0.60 m broad. There are here a few bricks in the walls. In the eastern wall there are two niches, cold water basins, built side by side. Some bricks are built into the walls of the niches, some in regular courses, but they consist mainly of limestone. *The Northern Niche* measures  $1.25 \times 1.40$  m (inside measurement). The floor covering consists of 4 slabs of tile (about  $50 \times 50$  cm) and round the edges as filling, chips of similar slabs. One of the slabs has a diagonal pattern, the remaining ones are papillary bricks, whose projections have been knocked away. The lining of the wall in this niche has been completely torn off. At the north-eastern side an outlet or drain runs out near



the bottom, but has been severely damaged (the lead pipe is wrenched off). To the S.E. is a square aperture, 12 cm from the bottom. A drain opening 18 cm above the bottom of the niche communicates with the floor in F. This floor lies 0.75 m above the bottom of the niche. *The Southern Niche* is  $1 \times 1.15$  m (inside measurement). Here the flooring consists of 4 marble slabs. The walls are lined with 12 upright marble slabs, some joined, one being ornamented with longitudinal grooves. Round the bottom edge runs a circle of mortar with an opening for the outlet facing due east. In this mortar circle are pivot-holes (for a bench?). Along the western, straight wall of the niche is a marble-covered step, 55 cm above the bottom. The niche was in communication with the floor in F.

The floor in F is covered with tiles, but only in the eastern part of the room is this covering preserved. It consists mainly of small tiles about  $30 \times 30$  cm. In front of the southern niche is a space of  $2.25 \times 2.40$  m enclosed by low marble slabs placed on edge, inside which is a floor made of large tiles, about  $50 \times 50$  cm, and a row of smaller ones along the northern edge. The large tiles are papillary bricks, whose projections have been knocked away. Before the niche is a marble-covered step (0.23 m high). The wall of the niche towards F was also once lined with marble slabs,



Fig. 81. View of the bath from the frigidaire.



but only scanty remains of these are left. Similarly the marble slabs on the upper side of the step have been broken away. In one of the floor slabs, in front of the niche is an outlet or drain shaped like a six-spoke wheel. This outlet was clearly blocked by sludge and a new drain in another slab was formed merely by a roughly made hole. The floor within the space enclosed by marble slabs placed on edge drops 6 cm towards the drain. A door leads from F to the open air on the S. side.

*T* is a perfectly square room with a side of 1.55 m. The walls in *T*, like those in *F*, have only a small admixture of bricks, the jambs are entirely of tiles. The door from *F* to *T* is 0.8 m wide. The door from *T* to Room I is 0.85 m wide and lies obliquely as regards the preceding door, farther to the W. The floor in *T* is made of mortar, without tiles.

*C* and Room I form, properly speaking, one room, owing to the hypocaust. In this part of the bath bricks predominate, the door-posts are built entirely of bricks and also the greater part of the niches; in the other walls courses of brick, some regular, alternate with courses of limestone. The masonry here approaches opus acervatim constructum (Vitruvius II, 8). For the core, which is here rather insignificant, mortar was chiefly used. The floors in *C* and Room I were made of large tiles with diagonal patterns 50×50 cm. In the south part of *C* the floor has been broken away. In *C* there are two niches, one to the south and one to the east.

*The Eastern Niche* measures 1.20×1.10 m (inside measurement). The bottom covering consists of marble slabs, one decorated with longitudinal lines, another with double circles. All the marble lining of the walls in this niche has been torn away. To N.E., there is a drain whose leadpipe is still partly preserved within it. The niche communicated by a drain with the floor in *C*, which lies only a trifle higher than the bottom level of the niche. This niche had no step inside.

*The Southern Niche* is 1.15×1.25 m (inside measurement). The floor is made of marble slabs, the southern, larger one being cracked and with a bit broken off so that an opening was made down to the hypocaust. Because of this damage the floor has sunk so that its level is lower in the south than in the north, although it had originally been the other way round, for the drain from the niche runs out into *C*, whose floor is about 15 cm lower than the bottom of the niche. Only scanty traces of the marble lining of the walls remain. N. of the niche in *C* is a threshold or bench 55 cm wide, which was originally covered with marble.

*Inlet and outlet.* The inlet into the niches in *C* comes from N and runs almost parallel with the long axis of the bath. About 7 m of the conduits are preserved, of which, however, only 2.5 m have the pipes in their original position. Both conduits are constructed in the same way. The grooved pipes of tiles are up in a bedding of limestone, 35—45 cm wide; the pipes are, covered over with rough limestone, the whole thing being finally covered with earth.

At the point where the inlet enters the niches it opens out into a cleansing tank,

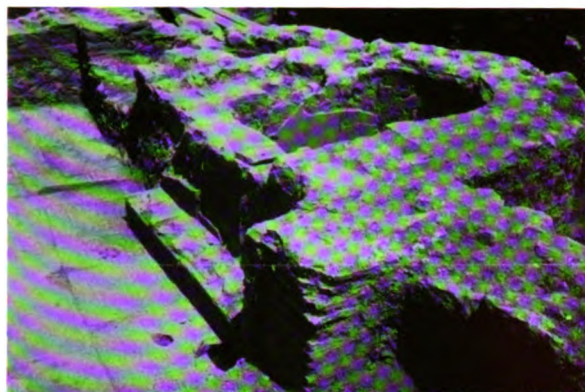


Fig. 82. The southern niche in the frigidaire.

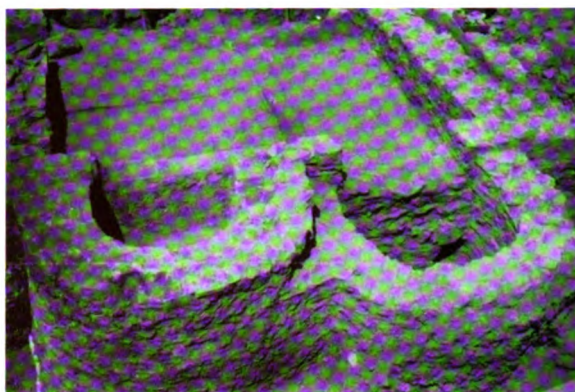


Fig. 83. The niches in the frigidaire from the outside.

1 × 0.50 m, now about 15 cm deep, originally probably covered over. The niches are connected with this tank by pipes, some parts of the pipe for the S. niche being preserved. The drain runs almost parallel with the inlet. The same drain is used by the niches in C and F.

*Room II* lies W. of T and Room I and is 2.50 × 3.10 m (inside measurement). The walls are not bonded with F and Room I and are constructed entirely of limestone, without mortar. In the S.W. corner of the room are the remains of a rammed concrete floor and a washing basin of limestone, about 0.50 m in diam. There is a door, 1.5 m wide, leading into Room II from F.

*Heating Plant.* The hypocaust extends under C and its niches, as well as under Room I. Its height is about 1.10 m. The floor is covered with tiles (50 × 50 cm) only in the doorway. The walls are entirely constructed of the larger sized bricks. The hypocaust is divided into three chambers, a large one below C and Room I and two smaller ones below each of the niches. The walls which separate the rooms have, apart from the doorways, 0.4 and 0.25 m wide, respectively, two triangular apertures on each side of them, formed by upended tiles. Two rows of pillars made of tiles as well as a row of pilaster-shaped structures, i. e. pillars half bricked up in the walls, support the floor of C. The pillars are constructed of round and square tiles, and though each pillar is generally made of one kind, in some instances however 3 to 4 round tiles have been laid as bases for square pillars. Some dislocations and settlements have taken place; this holds good first and foremost for the chamber below the eastern niche, which was filled with bits of tiles and earth up to a height of 0.2 m. The upper laterally displaced pillars rested upon this stratum.

The entrance into the hypocaust is roofed by a vaulted brick ceiling and is situated below the southern wall of the southern niche in C. The arch is not aligned with the wall of the niche. Two blocks of soft limestone, lying outside the door-posts are clearly remnants of the projecting jambs, which seem to have formed a corridor-like entrance. Two steps lead down from its floor into the hypocaust.





Fig. 84. The caldaire with separate niche from the west.



Fig. 85. The entrance into the hypocaust.

*The heating* was done entirely by hot air, which warmed the walls as well as the floors in C and Room I. No tubuli were employed; instead, papillary bricks were used 50—55 cm square, with 4 projections of an average length of 5 cm. The mechanism is as follows: The floor in C and Room I, resting upon pillars in the hypocaust, is laid in such a way that an interspace is formed between the floor and the walls. The bricks had been placed in position with their projections or pins facing the wall. In this way a hollow was created intended as a conduit for the hot air. If a further wall covering existed in C and Room I is unknown, since the bricks have here disappeared altogether. In the southern niche, where the heating devices are fairly well preserved, a layer 10—12 cm thick, of mortar and stone was inserted between the bricks and the marble covering. From the hypocaust channels, three on the west side of the walls, and one on the eastern side, run up to the height to which the walls are now preserved. These channels are square measuring 10×15 cm.

In the wall of the western side of the southern niche there are three irregularly placed apertures, which clearly led from the hollow out into the open air.

South of the entrance into the hypocaust is a more or less square room or chamber. Its walls are constructed of bricks and limestone, the greater part of the western



wall having been pulled down. Here was the entrance to the room. In the southern wall set obliquely to the entrance into the hypocaust is a niche, 0.75 m wide, about 1 m deep with a brick arch. In this niche the excavation brought to light layer of ashes approximately 10 cm thick which grew thinner in the room outside the niche; the floor of the room had been covered with chips of tiles or bricks.

The whole enterroom was dug out through the older settlement and has probably never been visible much above the soil. The back of the niche is covered by piled-up limestone.

The names here given for the rooms or chambers are in some respects unreliable, but on the whole they may be considered to have been used according to the ordinary plan: *apodyterium*, *frigidarium*, *tepidarium*, and *caldarium*, as well as a room interposed between the two last, here termed Room I.<sup>1</sup> At Asine Room I is properly speaking only a part of the *caldarium*, from which it was, however, separated by a door. It must also be interpreted as a sort of *sudatorium*.<sup>2</sup>

It is uncertain how Room II is to be interpreted. It was possibly a later addition. Its walls are not bonded in with the remaining walls, and there are no bricks in them. If it can have been directly heated, the heat channels passed up higher than the parts of the baths preserved at present, which is not probable. Perhaps, it might be looked upon as a simple kind of *laconicum*, with a *labrum*. The entire hypocaust in the

<sup>1</sup> This term with a number is used in accordance with current terminology, see D. Krencker, E. Krüger, H. Lehman and H. Watchler, *Die Trierer Kaiserthermen*, Augsburg 1929.

<sup>2</sup> A. Ballu, *Les ruines de Timgad, nouvelles découvertes*, Vol. II, Paris 1905, pp. 272, 280, considers that the three minor chambers I, II and III in the hot baths of Timgad, are to be looked upon as a kind of *tepidarium*, *caldarium* and *sudatorium* in this order.



Fig. 86. Waterpipes; inlet (left); outlet (right).



Fig. 87. Detail of the south niche in the frigidaire.

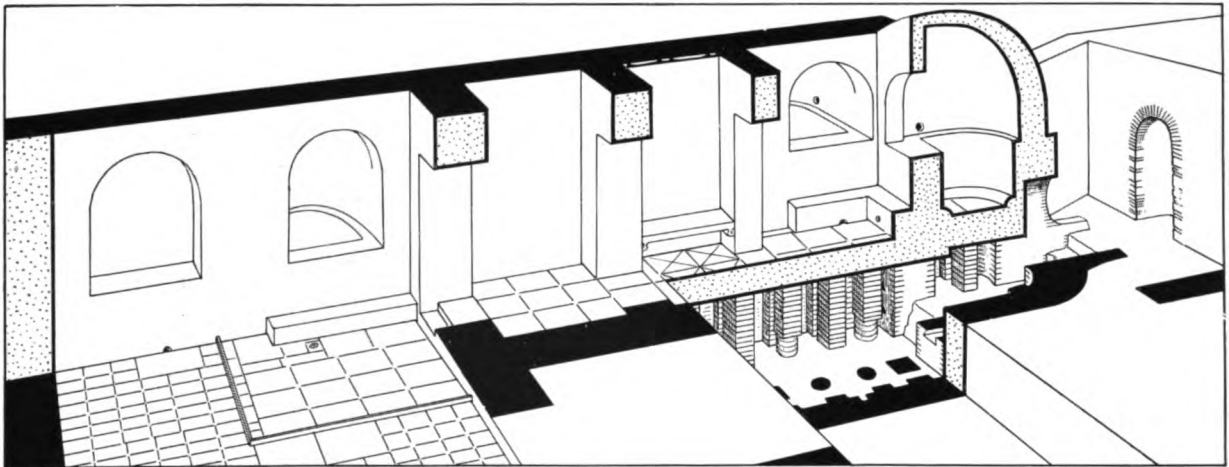


Fig. 88. The Bath. Reconstruction sketch (by B. Millberg).

Roman bath at Asine is uncommonly well preserved. It does not belong to the primitive establishments in which only the floors were heated, but is technically more developed. It is only the construction of the walls from papillary bricks, instead of the more economical tubuli, that distinguishes it from the remains of the majority of the larger Roman baths. The square apertures on the left side of the southern niche in the caldarium are clearly air passages, which opened into the channels in the walls, and formed outlets for the hot air. It is also possible that the vertical channels are a kind of chimneys.

It is difficult to determine where the furnace was. It was probably situated just inside the door of the hypocaust, i.e. below the southern niche of C, in which the warm water would have been. The room with a niche south of the hypocaust, might perhaps be interpreted as a *præfurnium* or a store-room for fuel and the like.<sup>1</sup>

It cannot now be determined with any certainty whence the bath got its water supply, though it may possibly have been from the two large tanks south of the Panagia (fig. 89).<sup>2</sup> The connection of the bath with the remaining Roman settlement of Asine is dealt with in the description of the latter. As to the dating of the bath it can only be ascertained that it belongs to the Roman period.

<sup>1</sup> G. Fusch. *Über Hypokausten-Heizungen*, Hannover 1910, p. 39. It is true that the floors of the caldarium and its basins were as a rule not heated directly, but this, sometimes evidently, was the case. The layer of ash and charcoal in the hypocaust shows clearly that this direct heating occurred in the Bath of Asine. In the niche south of the hypocaust, too layers of ash were found which seem to determine the niche as a *præfurnium*.

<sup>2</sup> These reservoirs, too, were investigated by Kofiniotis. See above p. 16.

## 5. THE GREAT RESERVOIR

During the 1922 campaign an ancient, rather complicated water reservoir system was investigated, which, to judge from all appearances, belonged to the Hellenistic or Roman period of the Lower Town (fig. 89).

This system is situated in the eastern part of Terrace III. The main cistern, whose plan is rectangular, with its long axis E.—W., measures 3.4 m in length and 1.7 m in width, the depth being 5 m. Upwards to a height of 4.15 m the long sides converge slightly, where the springing of the vaulted roof begins, which consists of a system of longitudinal ribs, alternating with level strips, all made in plaster, with which the whole inside of the cistern was also coated. This main cistern was joined at each narrow end by a lateral cistern, also oriented E.—W., 3 m long, 1 m broad at the outlet but widening inwards to a breadth of 1.45 m, and 1.7 m high, with vaulted roof and straight sides to E. and W. respectively. All angles between floors, walls, and roofs, both concave and convex, are bevelled as well as those between the walls. In the eastern part of the bottom of the main cistern appears a cauldron-shaped »catchment tank», which is circular and has a diameter of 0.7 m and a depth of 0.6 m, towards which the floor-level common to all the three cisterns, gently slopes. Obliquely above this well is the mouth of the cistern, which is square, measuring  $0.56 \times 0.77$  m, with a depth of 0.66 m, this too with plastered and bevelled angles.

Close to the northern wall of the main chamber a large stone,  $0.86 \times 0.52 \times 0.37$  m lies on the floor, probably dropped out of the wall. For here begins a thick filling of stone and soil, and on this side, at least, the cistern is not cut out of the rock; whether the rock meets behind the layer of plaster of the opposite wall, is not known.

Above ground there lies a masonry purification-basin, this, too, oriented E.—W., measuring inside 2.10 m in length, 0.55 m in width, and 1.30 m in depth. The walls in the W. and N. are 0.30 m, and in the E. 1.80 m thick (the outer part of the southern wall is concealed beneath a wall), and plastered inside and out. The bottom consists of small, round pebbles, laid in mortar; it has a cleaning well of the same form as that of the cistern, 0.35 m in diameter and 0.13 m deep. While the long-sides and the eastern end are straight, the western end is rounded. Across this runs a slightly sloping channel, 0.32 m long, to the edge of the mouth of the cistern.

The cistern was, when discovered, almost filled with earth and rubble (some rough stones of fairly large size). In this objects from a late period occurred at quite a considerable depth, such as bits of bricks and glazed potsherds. As far as possible inside the western lateral cistern a human skeleton was found a few cm above the floor, completely disturbed and in disorder and in front of this, on the floor itself, a layer of charcoal 1 cm thick, which extended for 0.8 m across the whole width of the floor. The presence of the skeleton was obviously not due to a regular burial but rather to some act of violence, or perhaps to an accident.



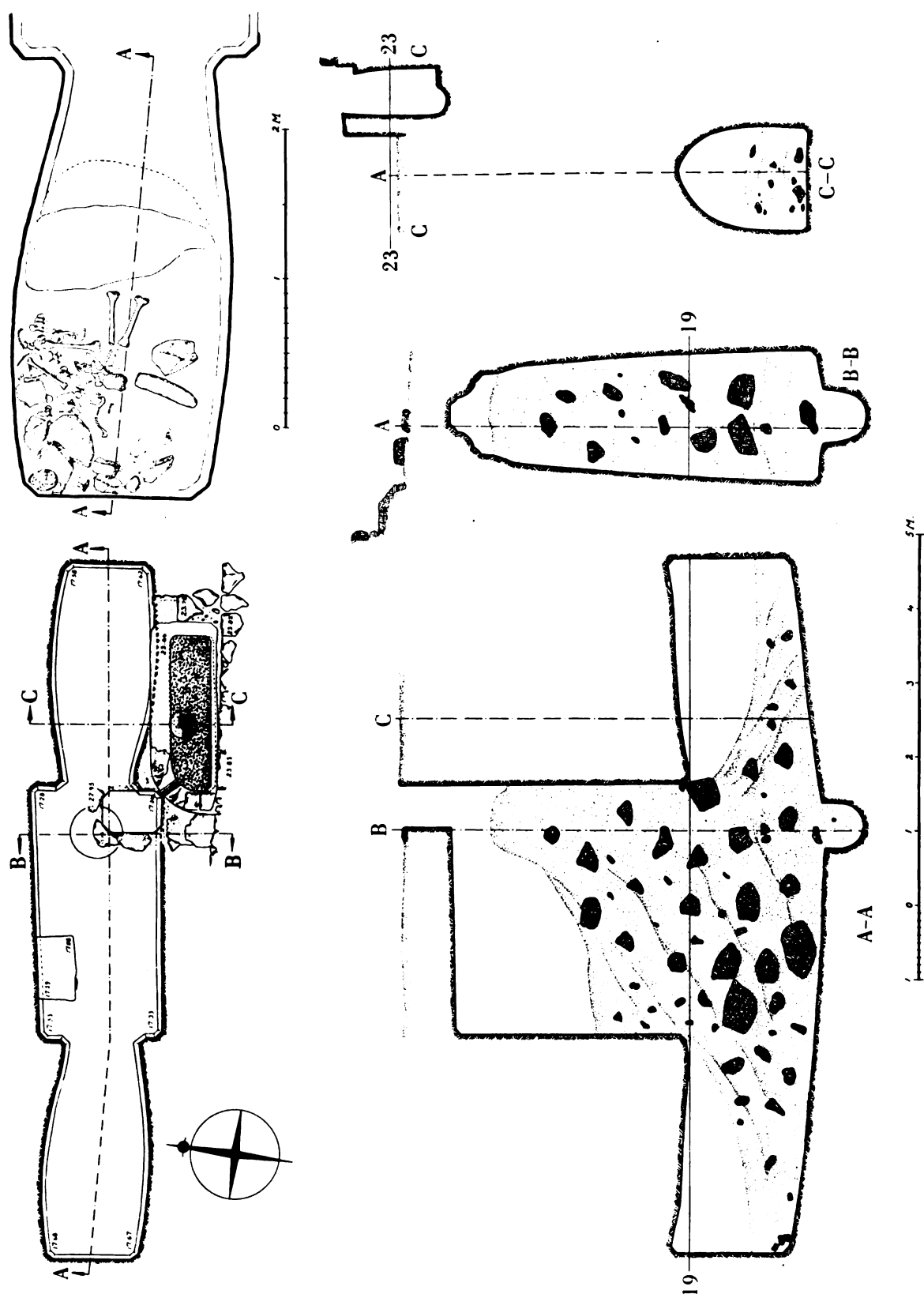


Fig. 89. Plan and section of the large cistern in the Lower City.

## 6. TOMBS

Among the architectural remains of the Lower City a large number of tombs were found dating from various periods. These consisted of burials in cists, pithoi, shafts or merely in earth-cut graves. As a large percentage of the tombs did not contain any datable burial gifts it is, of course, often very difficult to determine their date with certainty. As a rule the layers in which the tombs were constructed or excavated, indicated to which period they should be dated; sometimes their position in connection with some datable part of the architecture was the only evidence for the dating of the tombs; in other cases — and they are rather many — the dating is more or less uncertain. For it must be remembered that the burial customs have proved to be rather unreliable indications in the chronological questions.

In the ensuing pages descriptions of each tomb are given. It must, however, be pointed out that the descriptions vary very much and that the particulars given depend on the observations which could be made during the excavation, because it is obvious that even with a careful supervision of the workers it could sometimes not be avoided that these reported the discovery of a tomb so late that a thorough examination of the whole tomb could not be made. Thus certainly several tombs were never noticed by the supervisor: it is obvious that, for instance, an earth-cut tomb with a mutilated skeleton of a child very easily can be overlooked.

The tombs are numbered in parallel series for each period, this being always indicated before the number. In order to avoid too many series, however,



Fig. 90. Interior of the large cistern (the roof).

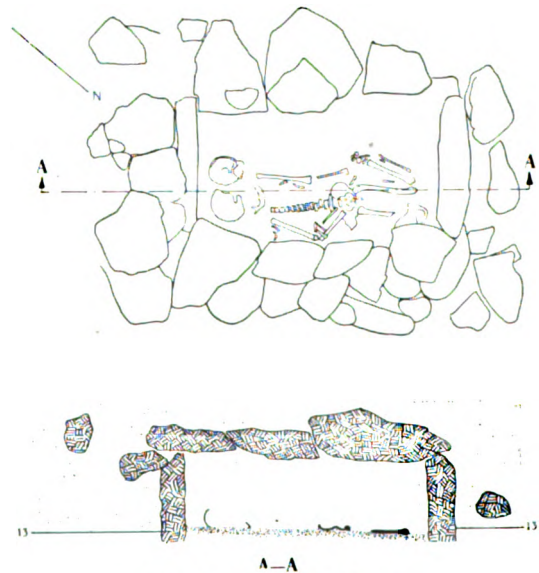


Fig. 91. Tomb M.H. 4.

three tombs which could not be dated with certainty to any of the E. H. or M. H. periods are referred to the M. H. series and placed first in this. For the same reason some of the tombs referred to the P. G. series may not be Proto-Geometric but Geometric in date as it was sometimes impossible to distribute the tombs between the two periods with certainty. They are, therefore, all ascribed to the P. G. series in the following list. Some of the tombs called Hellenistic, finally, may not at all be Hellenistic in date but Roman or even Christian.

In a few cases tombs from other sites than the Lower City have been included in the series of numbers. References of them are made to the pages where the tombs are described.<sup>1</sup> All the tombs are published in scale 1:30.

### M. H. TOMBS

Tomb M. H. 1. Square F 7. Surrounded by a course of stones, a skeleton in contracted position, lying on its left side, with the head towards the N. No burial gifts. Possibly E. H.?

Tomb M. H. 2. Square G 7. Surrounded by a course of stones, a skeleton in contracted position, lying on its left side, with the head towards the N. No burial gifts. Possibly E. H.?

Tomb M. H. 3. Square F 7. Surrounded by a course of stones, a skeleton in contracted position, lying on its left side, with the head towards the N. No burial gifts. Possibly E. H.?

Tomb M. H. 4. Square G 4. Irregular, square cist, oriented N. W.—S. E., after the walls in the M. H. house D, inside 0.95 m long, 0.50 m broad, 0.30 m deep. At each end an upright slab respectively  $0.56 \times 0.12$  m, and  $0.58 \times 0.10$  m, the sides built of flat stones, laid upon each other in a couple of courses; covered by three irregular slabs, the largest  $0.85 \times 0.54$  m (one of them of conglomerate), lying on a level with the floor in the M. H. house. The bottom of the cist marked by a layer of shingle and small rubble. On this rested a skeleton, lying on its back with the head towards the S. E., the left arm extended along the side, the right bent, with the hand over the pudenda; the shins strongly bent back. Near the right knee, in the northern corner of the cist, lay a Matt-painted jug. In the cist were also found two bronze beads (see below). Fig. 91.

Tomb M. H. 5. Square G 5. Earth-cut grave. Remains of a skeleton lying in contracted position with the head in a northerly direction, the legs drawn up. No burial gifts.

Tomb M. H. 6. Square G 5. Earth-cut grave. Skeletal remains. The lower extremities extending below Wall 28, a defective skeleton lying with the head in a north-eastern

direction. Over the head-end a small accumulation of rubble. No burial gifts.

Tomb M. H. 7. Square G 6. Earth-cut grave. Skeletal remains of a youngish person. No burial gifts.

Tomb M. H. 8. Square G 7. Earth-cut grave. Below some rubble a skeleton, probably in contracted position, oriented with the head to the E. The arms somewhat bent. No burial gifts.

Tomb M. H. 9. Square F 6. Close to the M. H. wall 34 the skeleton of an infant, probably in contracted position with the head in a N. E. direction. No burial gifts.

Tomb M. H. 10. Square F 6. Pithos-tomb. In a large, very much broken pithos, lying on its side near Wall 36, parts of skeletal remains of a youngish person together with charcoal particles. No burial gifts.

Tomb M. H. 11. Square F 6. Pithos-tomb. A strongly fired, crushed pithos, containing a child's skeleton. No burial gifts.

Tomb M. H. 12. Square F 7. Pithos-tomb. Large pithos containing skeletal remains of a youngish person. No burial gifts.

Tomb M. H. 13. Square F 7. Earth-cut grave. A very defect skeleton of a very small infant, probably in contracted position, orientation S. E.—N. W. No burial gifts.

Tomb M. H. 14. Square F 7. Some skeletal remains, possibly those of a child. No burial gifts.

Tomb M. H. 15. Square E 6. Earth-cut grave. A skeleton. Probably oriented N. W.—S. E. No burial gifts.

Tomb M. H. 16. Square E 7. Earth-cut grave. Below some rubble, a child's skeleton, probably in contracted position, orientation E.—W. No burial gifts.

Tomb M. H. 17. Square H 6. Pithos-tomb. In an about 0.3 m deep cavity or pit a large Matt-painted pithos (see below), in a recumbent position with its mouth towards S. E. It was closed with the bottom portion of a coarse vessel. The joints tightened with a 1 cm thick

<sup>1</sup> The tombs on the acropolis are, however, not included in the following list.



layer of clay. The vessel was filled with fine earth, in which lay the skeletal remains of an infant. No burial gifts.

Tomb M. H. 18. Square I 4. Wall 7 of House B, a square cist, oriented N. E.—S. W., inside 0.70 m long, 0.38 m broad, 0.20 m deep. On each side a slab raised on edge: The N. E. end-slab  $0.51 \times 0.3 \times 0.08$  m, the S. E. one  $0.57 \times 0.29 \times 0.06$  m; the S. E. side-slab  $0.54 \times 0.10$  m, the N. E. one  $0.75 \times 0.06$  m. Covered with a slab of conglomerate 0.76 m long and 0.16 m thick. A small opening above the S. W. end-slab was covered over with a smaller slab of the same kind of conglomerate, 0.31 m long and 0.06 m thick, which projected 0.2 m beyond the cist. The two cover-slabs lay at the same height as the upper edge of the wall.

The cist was altogether filled with loose earth right down to the bottom consisting of clayey soil.<sup>1</sup> On this lay a rather defective child's skeleton diagonally in the cist, in a slightly bent position and somewhat on the right side, with the head, which was bent forward, towards the E. N. E., the arms slightly bent, the hands (gone now) above the abdomen. Lower extremities bent. Between the skeleton and the N. W. side-slab was found a jug, in the northern corner in the following order: a purple shell, a cup and two jars (see below). Here and there, round about the skeleton, were found particles of charcoal, and close to the hip-bones some vertebrae of fish. Fig. 92.

Tomb M. H. 19. Square K 2. Earth-cut grave. Very defective skeleton. No burial gifts.

Tomb M. H. 20. Square K. 3 Earth-cut grave (?). On its bottom, consisting of a layer of shingle, the skeleton of a mesocranial woman<sup>2</sup> in a contracted position, lying on the left side with the head towards the N. W. the trunk strongly bent forward, the arms slightly bent, with the hands over the pudenda; the left leg rather much bent

<sup>1</sup> The bottom of the grave lay higher than the bottom of the wall.

<sup>2</sup> Fürst, l. c., No. 18 FA, p. 27.

and drawn up, the right very much bent and drawn up. Before the head a cup (see below).

Near the feet, scarcely 0.1 m away from them, were found remains of a surface-fired brick standing on edge vertically in the longitudinal direction of the skeleton. Its thickness seems to have been 0.18 m.<sup>1</sup> At the head-end, too, were traces of such a brick. It is possible that the skeleton has been framed by such bricks, in which case the tomb should really be looked upon as a cist-tomb.

Tomb M. H. 21. Square K 2. Earth-cut grave. The skeleton of a mesocranial, about 30-years-old man,<sup>2</sup> in contracted position, lying slightly turned on the right side, with the head towards the N.W., the right arm slightly bent, with the hand over the pudenda; the left one bent, with the hand over the right elbow; the legs bent and — especially the left — drawn up. Close to the right shoulder a fragmentary bowl (see below).

Close to the feet a child's skeleton (see Tomb M. H. 22).

Tomb M. H. 22. Square K 2. Earth-cut grave. Close to the feet of the skeleton Tomb M. H. 21 the very defective skeleton of an infant. The head appeared to have been lying towards the N. No burial gifts. The two tombs need not have any relation with one another.

Tomb. M. H. 23. Square L 2. Earth-cut grave. Immediately on top of an up to 0.05—0.06 m thick lime-floor of House C (?) (cf. Tomb M. H. 24) lay the skeleton of a brachycranial, about 30—40-years-old (?) man,<sup>3</sup> in contracted position on its left side with the head towards the S. W.; the arms bent with the hands at the waist; the legs bent and slightly drawn up. Between the left elbow and the chest was found a whorl of fired clay (see below).

Tomb M. H. 24. Square L 3. Earth-cut grave, lying in E. H. stratum, 0.20—0.30 m below the lime-floor mentioned in Tomb M. H. 23. A very defective skeleton in con-

<sup>1</sup> Possibly there have been two 0.02 m thick, faintly fired clay tiles, placed 0.14 m apart from one another with the space between filled in with unfired clay.

<sup>2</sup> Fürst, l. c., No. 19 FA, p. 27 f.

<sup>3</sup> Fürst, l. c., No. 20 FA, p. 28 ff.

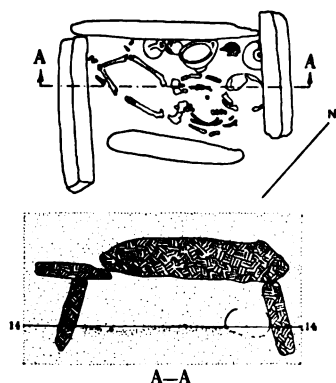


Fig. 92. Tomb M. H. 18.



Fig. 93. Tomb M. H. 26.

tracted position, the head missing (cf. Tomb M. H. 25). No burial gifts.

Tomb M. H. 25. Square K 4. Earth-cut grave. A very defective skeleton, properly speaking only the cranium together with a few bone fragments. No burial gifts. These skeletal remains may possibly belong to the skeleton in Tomb M. H. 24, which was without a head.

Tomb M. H. 26. Square K 3. Irregularly square cist oriented N. E.—S. W., inside 1.05 m long, 0.60 m broad, 0.35 m deep. Built of flat slabs of stone, large and small, laid in courses. No cover-slab. The bottom of the cist was marked by a layer of shingle. On this rested a skeleton in contracted position, lying on its left side, with the head towards the S. W., the left arm extended along the side, with the hand over the pudenda, the right arm bent with the lower part of the arm on top of the abdomen. The legs very much bent — especially the right one — and drawn up. No burial gifts. Fig. 93.

Tomb M. H. 27. Square K 3. Irregularly square cist oriented N. E.—S. W., inside 1.10 m long, 0.60 m broad, 0.40 m deep. At each end a slab placed on edge, at the

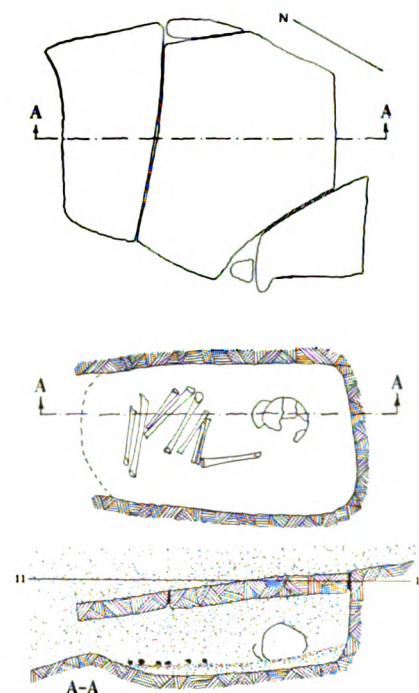


Fig. 94. Tomb M. H. 28.

sides smaller ones. No cover-slabs. The bottom of the cist was marked by a layer of shingle, placed on the rock bottom. On this rested the very defective skeleton of an approximately 40-years-old mesocranial man,<sup>1</sup> in contracted position, lying on his left side with the head towards the S. W. One hand close to the chin, the other over the pudenda; the position of the arms otherwise uncertain. The legs bent and very much drawn up. No burial gifts.

Tomb M. H. 28. Square K 3. Shaft-tomb, rounded square, oriented N.N.W.—S.S.E., inside 1.08 m long, (the end to the N.N.W. damaged), 0.55—0.60 m broad, 0.35 m deep. Covered with a slab that had broken into four pieces, 1.08 × 1.03 × 0.08 m, resting on the filling of the shaft (fine soil) with the upper side aligned with the surface of the rock. The bottom of the shaft was covered by a 0.05 m thick layer of shingle. On this rested a very defective skeleton in contracted position, lying on its left side with the head towards the S.S.E. The left arm bent, the hand

<sup>1</sup> Fürst, l. c., No. 21 FA, p. 30 f.



has clearly been lying over the abdomen; the right arm missing. The legs very much bent and drawn up, the right one very much so. No burial gift. Fig. 94.

Tomb M. H. 29. Square D 6. Cist, irregularly square, oriented N.E.—S.W., inside 1.13 m long, 0.6 m broad, 0.35 m deep. Built of flat stones, large and small, laid in courses. Sometimes — as in the N.E. end — there was a slab placed on edge. Covered with three irregular slabs (the longest, in the N.E., of conglomerate),  $0.88 \times 0.55 \times 0.11$  m to  $0.87 \times 0.50 \times 0.09$  m. Openings and cracks stuffed with rubble and slabs. On the bottom of the cist rested a very defective skeleton of a dolichocranial, about 30-years-old man,<sup>1</sup> in contracted position, lying slightly turned on the side, with the head to the N.E., the right arm probably strongly bent with the hand below the shoulder, the left arm defective, the legs very much bent and somewhat drawn up. On top of the trunk lay two stones, the larger  $0.34 \times 0.15 \times 0.12$  m (to «bind» the dead?).

<sup>1</sup> Fürst, l. c., No. 22 FA, p. 32.

The skeleton was covered by a 0.2 m thick layer of clay and soil, containing quite a good many small shells, on top of this an empty space up to the under-side of the cover-slabs. No burial gifts. Fig. 95.

Tomb M. H. 30. Square B 5. Square cist, oriented N.E.—S.W., inside 1.10 m long, 0.55 m broad, 0.35 m deep. At the N.E. end a slab placed on edge, 0.44 m long and 0.10 m thick, the sides built of flat stones laid in a couple of courses. The greater part of the south-eastern side and south-western end destroyed in the construction of a later wall. No cover-slabs. The bottom of the cist was marked by a layer of shingle. On this rested the skeleton of an approximately 40-years-old woman (?)<sup>2</sup> in contracted position, lying somewhat on its right side, with the head to the N.E., the right arm bent with the hand on the right hip, the left arm slightly bent with the hand at the side; the legs somewhat drawn up (the lower extremities spoiled in the construction of the aforesaid wall). The cist filled with

<sup>2</sup> Fürst, l. c., No. 23 FA, p. 32.

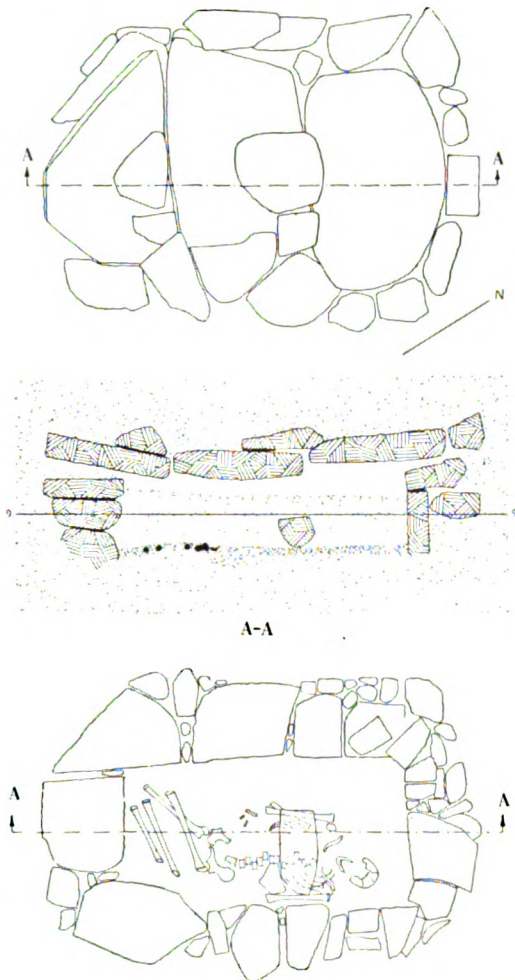


Fig. 95. Tomb M.H. 29.





Fig. 96. Tomb M. H. 31.

soil containing a large percentage of clay. No burial gifts.

Tomb M. H. 31. Square E 6. Earth-cut grave. On a layer of shingle and pebble lay the skeleton of a meso-cranial, about 60-years-old man,<sup>1</sup> in contracted position, lying on his left side with the hands over the face, the legs very much contracted and — especially the right one — very much drawn up to the chin. Above the knees, before the arms, a vase (see below). Fig. 96.

Tomb M. H. 32. Square D 5. Square cist, oriented N.W.—S.E., N.E.—S.W., inside 0.48 m long and broad, 0.4 m deep. On the N.W. side a 0.4 m long and 0.12 m thick slab placed on edge, on the south-western one two slabs, respectively  $0.38 \times 0.17$  m and  $0.24 \times 0.13$  m, on the south-eastern side a similar slab  $0.30 \times 0.11$  m, together with a cobble stone. The N.E. side is spoiled, but seems to have consisted of two such slabs. One of these, together with other stones and rubble fallen down into the cist, which was without cover. The skeleton — of an infant — thus became spoiled, thus it is uncertain whether it had been lying in contracted position. The head to the S. E. In the southern corner of the cist a vase (see below), on the edge of the rock which rises towards the S.W. side of the cist.

Immediately outside the N.W. side-slab a child's skeleton (see Tomb M. H. 33).

Tomb M. H. 33. Square D 5. Earth-cut grave. Immediately outside the N.W. side-slab of Tomb M. H. 32 and on level with its bottom the skeleton of an infant lying with the head to the E.N.E. The lower portion missing and the remainder of the skeleton also very defective. No burial gifts.

Tomb M. H. 34. Square C 7. Square cist, oriented N.E.—S.W., inside 0.74 m long, 0.50 m broad, and 0.3

<sup>1</sup> Fürst, l. c., No. 24 FA, p. 32 ff.

m deep. Built of large and small stones and rubble laid in courses, sometimes as in the N. W. end — a slab standing on end. Covered with a single slab of conglomerate,  $1.37 \times 0.90 \times 0.08$ —0.18 m. The openings and cracks stuffed with minor slabs and rubble. The bottom of the cist was marked by a layer of fine shingle. On this a rather defective skeleton in contracted position, lying on its left side, with the head to the S.W., the arms bent with — as it seems — the now vanished hands in front of the face, the legs rather contracted and — especially the left one — drawn up. Close to the facial portion of the cranium was found a vase (see below). The skeleton and vase lay embedded in a stratum of clay, which had cracked and was layered, but left the upper part of the head uncovered. Above this commenced the filling of the cist, consisting of loose, brown soil. Fig. 97.

Tomb M. H. 35. Square D 5. Earth-cut grave located below an M. H. floor of hard-rammed clay in Room XVIII. A very defective child's skeleton. No burial gifts.

Tomb M. H. 36. Square D 6. Earth-cut grave. A child's skeleton, defective and also spoiled before it was noticed. No burial gifts.

Tomb M. H. 37. Square G 7. A very much spoiled earth-cut grave. Few skeletal remains. No burial gifts.

Tomb M. H. 38. Square H 3. Earth-cut grave. A partly defective skeleton in contracted position, lying somewhat

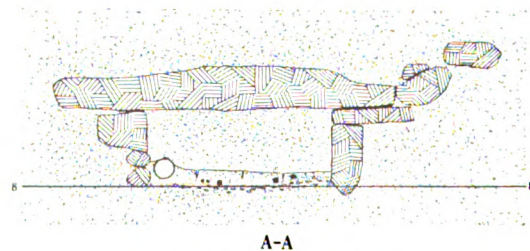
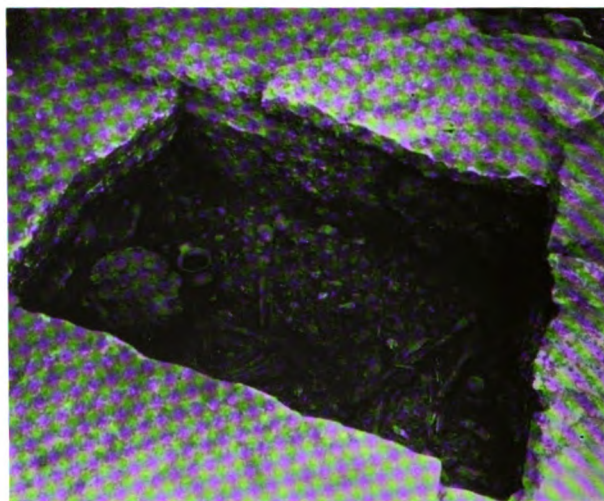


Fig. 97. Tomb M. H. 34.

on its right side with the head to the N.W., the trunk bent, the arms bent and the right hand at the face, the left one on the breast. The right leg strongly contracted and drawn up to the chin, so that the distance between the knee and the forehead was merely 0.18 m. Near the right shoulder a small, black cup (see below). Very close round about and below the skeleton some M. H. sherds. Fig. 98.

Tomb M. H. 39. Square H 6. Earth-cut grave. In a pit 0.2 m deep skeletal remains of a very young child, with the head to the S.E. covered by a large fragment of a coarse horizontally placed pithos. No burial gifts.

Tomb M. H. 40. Square F 3. Earth-cut grave with a defective skeleton of a very small infant. No burial gifts.

Tomb M. H. 41. Square F 3. Earth-cut grave with a child's skeleton. No burial gifts.

Tomb M. H. 42. Square F 2. In the M. H. Wall 44, and 0.15—0.20 m below its surface, a child's skeleton surrounded by fairly large rubble and brick debris, spoiled by the workmen before it had been noticed. Rested direct on the rock. No burial gifts.

Tomb M. H. 43. Square G 3. Earth-cut grave with a child's skeleton. No burial gifts.

Tomb M. H. 44. Square G 3. Earth-cut grave with a child's skeleton. No burial gifts.

Tomb M. H. 45. Square G 3. In a 0.20 m deep bothros a pithos, 0.75 m high, with a diameter of 0.55 m, lying with its mouth to the E., the upper side crushed. In this a child's skeleton lying on its left side with the head to the W., the arms bent and directed forward, the legs contracted and drawn up. No burial gifts. Fig. 99.



Fig. 99. Tomb M. H. 45.



Fig. 98. Tomb M. H. 38.

Tomb M. H. 46. Square F 2. Earth-cut grave with the skeleton of a very small infant. No burial gifts.

Tomb M. H. 47. Square H 2. Earth-cut grave. On a layer of shingle a skeleton in contracted position, lying on its right side, with the head in a northerly direction. The skeleton was very much spoiled by the workers before it had been noticed. No burial gifts.

Tomb M. H. 48. Square H 2. Close to the M. H. Wall 4 an earth-cut grave with the skeleton of an infant. No burial gifts.

Tomb M. H. 49. Square H 2. 0.80 m from the M. H. Wall 4 an earth-cut grave with the defective skeleton of an infant in contracted position, lying on its back with the head in a northerly direction, the legs contracted and very much drawn up and spread out in both directions. No burial gifts.

Tomb M. H. 50. Square G 3. 0.5 m S. of Tomb M. H. 4, an earth-cut grave with the greatly defective and spoiled skeleton of a child, resting on a layer of pebble. No burial gifts.

Tomb M. H. 51. Square F 2. Earth-cut grave with a defective skeleton of a child in contracted position. No burial gifts.

Tombs M. H. 52 and 53. Square F-G 3. Double-tomb edged by rubble, perhaps originally forming the sides of a cist, in such case very defective and also spoiled by the workers before the tomb was noticed. No cover-slabs. On a layer of fine shingle rested two skeletons in contracted position with the heads to the S.W., one, M. H. 52, partly below the other (M. H. 53).



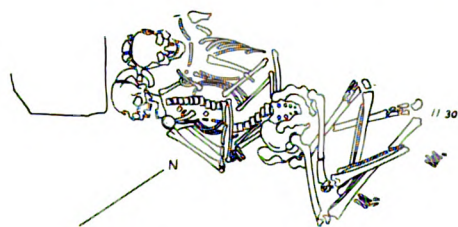


Fig. 100. Tombs M.H. 52 and 53.

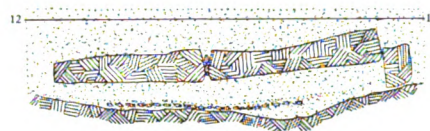
M. H. 52 (the north-western one). The skeleton of a mesocranial, about 40-years-old man<sup>1</sup> lying on the back with the arms bent and the hands on top of the abdomen, the legs strongly contracted and, especially the right one, drawn up to the chin, the knees pointing to the N.W.

M. H. 53 (the south-eastern one). The skeleton of a mesocranial, 30—40-years-old woman,<sup>2</sup> lying on the back with the arms bent, the hands thus may have been folded on the breast, the legs contracted and drawn up, the knees pointing to the S.E. The upper part of the trunk

<sup>1</sup> Fürst, l. c., No. 14 FA, p. 24 f.

<sup>2</sup> Fürst, l. c., No. 15 FA, p. 25 f.

lay on top of the right part of the corresponding portion of M. H. 52, the lower part of the trunk straight on top of M. H. 52's trunk. On the right side on M. H. 52's head, but extending towards M. H. 53's shoulder, and probably belonging to the latter, were found fragments of bronze tweezers and near the right shoulder of M. H.



A—A

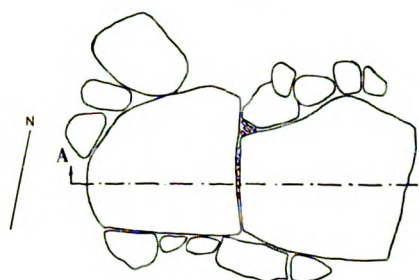


Fig. 101. Tomb M.H. 54.

53 the bottom portion of a Yellow-Minyan vase (see below). Fig. 100.

Tomb M. H. 54. Square G 2. Above a slight depression in the rock, 0.10 m deep, lay two cover-slabs of conglomerate, oriented E.—W., respectively  $0.7 \times 0.65 \times 0.12$  m and  $0.65 \times 0.6 \times 0.12$  m, as well as some rubble near the edges. At the end of the eastern cover-slab lay a cobble stone on the rock, forming the delimitation in that direction. Below the 0.10 m thick rubble filling, on the rock, a bed of shingle. No traces of skeletal remains. No burial gifts. Cenotaph?

One of the cover-slabs projected below the edge of the M. H. Wall 42, so the tomb must be assumed to be earlier than this wall. Fig. 101.

Tomb M. H. 55. Square F 3. Irregularly square cist oriented N.W.—S.E., inside 0.47 m long, 0.3 m broad and 0.2 m deep. On the north-eastern side a slab raised on edge,  $0.53 \times 0.13$  m, in the south-western a similar slab,  $0.45 \times 0.06$  m, together with a cobble stone, the north-western end consisted of a slab  $0.43 \times 0.2$  m, the south-eastern one of two smaller ones. No cover-slabs. On the bottom of the cist the rather defective skeleton of an infant in contracted position, laying on its left side with the head to the N.W., the arms stretched forward and downwards, the legs contracted and drawn up. No burial gifts.

Tomb M. H. 56. Square I 3. Earth-cut grave. A quite defective child's skeleton in contracted position, lying on the right side with the head to the N.E., the legs contracted and drawn up. No burial gifts.



Tomb M. H. 57. Square R 2; Ter. III. Pithos-tomb. Coarse pithos, containing a child's skeleton. No burial gifts.

Tomb M. H. 58. Square T 3; Ter. III. Close to the M. H. Wall 14 an earth-cut grave or a demolished cist-tomb (?). Below some rubble and on a stone floor (?) a very defective skeleton of an about 50-years-old man<sup>1</sup> in contracted

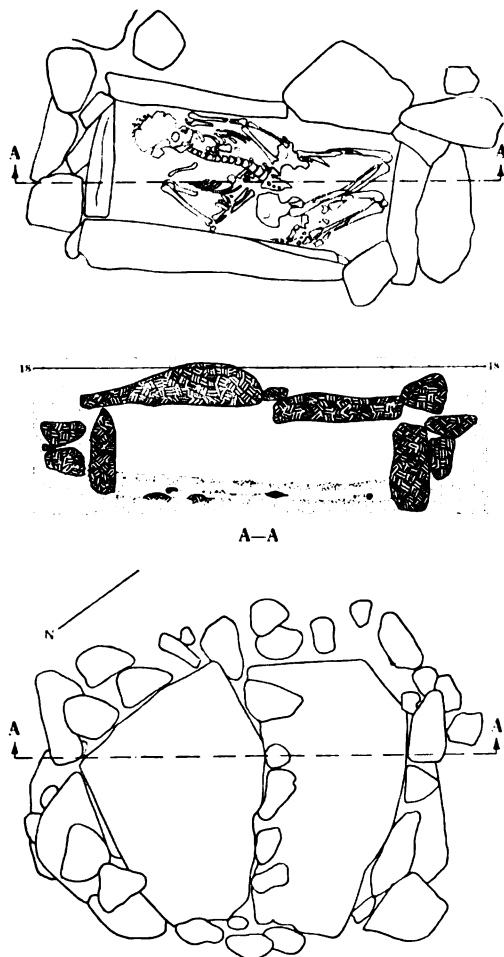


Fig. 102. Tomb M. H. 60.

position, lying probably on the left side and with the head to the S. Close to the legs an obsidian chip.

Tomb M. H. 59. Square U 3; Ter. III. Oval cist, oriented N.E.—S.W., inside 1.15 m long, 0.3 m deep. Constructed of flat-lying, irregular, more or less flat stones. The stones of the north-western side were missing, likewise the cover-slabs. The bottom of the cist was marked by a layer of shingle. On this rested the rather defective skeleton of a dolichocranial, about 40—50-years-old woman (?)<sup>2</sup> in contracted position, lying on the left side with the head to the S.W., the legs very much contracted and drawn up. In the tomb was found an obsidian chip.

<sup>1</sup> Fürst, l. c., No. 6 FA, p. 18.

<sup>2</sup> Fürst, l. c., No. 7 FA, p. 18 f.

Tomb M. H. 60. Square U 2; Ter. III. On top of bothros No. 2 a rectangular cist oriented N.E.—S.W., inside 1.1 m long, 0.47 m broad, and 0.35 m deep. The north-western longside a single slab, 1.2 m long, 0.15 m thick, placed on edge, the other longside a similar slab, 0.75 m long, 0.1 m thick, and a cobble stone 0.5×0.35 m with a flat inner side, the north-eastern end with a slab placed on edge, 0.47×0.35×0.1 m, the south-western one a similar slab 0.55×0.35×0.15 m. Covered by two irregular slabs of respectively 1.05×0.75×0.18 m and 1.1×0.55×0.12 m. The end-slabs were outwardly supported by cobble stones and the openings between the slabs of the cist were stuffed with such. The bottom of the cist was marked by a layer of clay. On this rested the skeleton of a woman,<sup>3</sup> lying slightly turned on the left side, with the head to the N.E., the arms slightly bent, with the hands laid over the pudenda, the legs strongly contracted but not drawn up. Near the left edge of the pelvis and the left hand a whorl (see below). Close to the skeleton were also some chips of obsidian. On top of the skeleton an approximately 0.04 m thick layer of loose sea-sand with lumps of clay, on top of that, a 0.03 m thick, firm (dried) layer of sand mixed with clay, on top of that the cist was empty up to the cover-slabs. Fig. 102.

Tomb M. H. 61. Square V 3; Ter. III. Square cist, oriented N.W.—S.E., inside 1.15 (?) m long 0.6 m broad and 0.3 m deep. In the S.W. side two slabs placed on edge, respectively 0.5×0.12 m and 0.4×0.15 m, otherwise the sides were constructed of flat stones laid in courses. The north-western end was missing. Only one of the cover-slabs left in a displaced position over the south-eastern end. The bottom of the cist was marked by a layer of shingle. On this rested the rather defective skeleton of a not young woman<sup>4</sup> in contracted position, lying on the right side with the head to the N.N.W., one arm very much bent with the hand near the knees, the legs strongly contracted and much drawn up. No burial gifts.

Tomb M. H. 62. Square V 2; Ter. III. Irregularly oblong cist oriented N.W.—S.E., inside about 1.5 m long, 1.05 m broad and 0.3 m deep. The sides were constructed of large and small rubble<sup>5</sup> in one or two courses, re-inforced by weakly fired brick. No cover-slabs. The bottom of the cist was marked by a layer of shingle and fine gravel. On this rested the skeleton of a brachycranial, 30—40-years-old man<sup>6</sup> in contracted position, lying on the left side with the head to the S.E., the right arm strongly bent inwards with the hand over the breast, the left arm bent with the hand near the right elbow, the legs contracted and drawn up. Close to the skeleton some small animal bones.

Tomb M. H. 63. Square S 4; Ter. III. Earth-cut grave. On a layer of shingle a rather defective and disturbed

<sup>3</sup> Fürst, l. c., No. 8 FA, p. 19.

<sup>4</sup> Fürst, l. c., No. 9 FA, p. 19.

<sup>5</sup> Amongst these lay two grind-stones.

<sup>6</sup> Fürst, l. c., No. 10 FA, p. 19 ff.

skeleton of a child in contracted position, probably lying on its back, the head to the N.W. One leg strongly contracted and drawn up, the other missing. Close to the skeleton lay a bone pin (see below).

Tomb M. H. 64. Square T 1; Ter. III. Earth-cut grave. The very defective skeleton of an infant in contracted position, lying on its left side with the head to the N.N.W. No burial gifts. Around the skeleton some pieces of clay which may have formed the packing for the joints of a wooden coffin.

Tomb M. H. 65. Square T 1; Ter. III. Earth-cut grave. A very defective skeleton of an infant, lying in contracted position and on its back, the head to the N.E. No burial gifts. Around the skeleton some pieces of clay which may have been used as packing for the joints of a wooden coffin. In the tomb was some fine shingle which nevertheless did not form a real bed below the skeleton.

Tomb M. H. 66. Square S 3; Ter. III. Earth-cut grave. The skeleton of a child in contracted position lying on its left side with the head to the S.W., the right arm bent backwards with the hand behind the back, the left one stretched out along the trunk with the hand over the pudenda; the legs slightly contracted. No burial gifts.

Tomb M. H. 67. Square T 1; Ter. III. Earth-cut grave. A very defective skeleton of an infant, probably in contracted position, with the head to the S.W. In the neighbourhood was found a whorl whose relation to the tomb is, however, uncertain. Around the skeleton were found some pieces of clay which possibly constituted the packing for the joints in a wooden coffin.

Tomb M. H. 68. Square S 4; Ter. III. Earth-cut grave. The skeleton of an infant lying on its back with the head to the N.N.E., the arms extended along the sides. The pelvis and legs were missing, being clearly destroyed in the construction of a fresh tomb, M. H. 69. No burial gifts.

Tomb M. H. 69. Square S 4; Ter. III. Earth-cut grave. The skeleton of an infant in contracted position, lying on its left side with the head to the S.W., the left arm seems to have been very much bent with the hand over the face, the right extended along the back; the legs contracted and drawn up to the chin and occupying the place where the vanished lower portion of the skeleton in Tomb M. H. 68 had obviously been lying. No burial gifts.

Tomb M. H. 70. Square T 1; Ter. III. Earth-cut grave in bothros 7. The skeleton of a very small infant in a very much contracted position, with the head to the S.W. No burial gifts.

Tomb M. H. 71. Square S 1; Ter. III. Earth-cut grave. Below a stone a defective child's skeleton. No burial gifts.

Tomb M. H. 72. Square S 1; Ter. III. Square cist oriented W.N.W.—E.S.E., inside about 0.5 m long, 0.40 m broad and 0.20 m deep. In the northern side a transversely placed slab 0.4 × 0.05 m, in the southern one a similar one 0.25 × 0.07 m, in the western end an upright slab 0.35 × 0.12 m, in the southern one a similar one about 0.4 × 0.1 m. In the cist some rubble and slabs of stone, possibly derived from

the covering, for such was missing. The cist contained, apart from at least two crania, the defective skeleton of an infant lying probably on its back with the head to the E., the legs contracted but not drawn up. No burial gifts.

Tomb M. H. 73. Square S 1; Ter. III. Close to Tomb M. H. 72 a cist with a skeleton, covered with slabs.

Tomb M. H. 74. Square S 1; Ter. III. Earth-cut grave, partly cut out of the rock. A partly defective skeleton of a dolichocranial 40—50-years-old woman,<sup>1</sup> in contracted position, lying somewhat on the left side with the head to the S.S.W., the arms bent with the hands over the abdomen, the legs contracted and — especially the right one — drawn up. The skeleton rested on a thin layer of shingle below which the rock commenced. Above the right knee was found a whorl of clay<sup>2</sup> (see below).

Tomb M. H. 75. Square T 1; Ter. III. Cist with cover-slab below Wall 24. Not investigated by reason of its position.

Tomb M. H. 76. Square Q 3; Ter. III. Earth-cut grave situated close to Tomb M. H. 77. A child's skeleton in contracted position. No burial gifts.

Tomb M. H. 77. Square Q 3; Ter. III. Close to Tomb M. H. 76, an earth-cut grave with a child's skeleton. No burial gifts.

Tomb M. H. 78. Square Q 3; Ter. III. Square cist, greatly damaged, constructed of slabs placed on edge. Cover-slabs missing. One side-slab common with Tomb M. H. 83. In the cist a very defective skeleton, probably in contracted position. No burial gifts.

Tomb M. H. 79. Square Q 3; Ter. III. Earth-cut grave. On top of one of the cover-slabs of Tomb M. H. 83 a defective child's skeleton. No burial gifts.

Tomb M. H. 80. Square Q 3; Ter. III. Square cist oriented N.N.E.—S.S.W., inside 1.15 m long, 0.6 m broad and 0.4 m deep. Constructed of slabs placed on edge: at the western side two of respectively 0.72 × 0.06 m (outside buttressed by rubble) and 0.35 × 0.07 m measurements, in the eastern end two of respectively 0.62 × 0.08 m and 0.49 × 0.07 m measurements, in the northern end one measuring 0.56 × 0.43 × 0.07 m, at the top completed with a small slab lying flat and measuring 0.17 × 0.06 m, in the southern one of 0.68 × 0.47 × 0.07 m. Covered with a slab measuring 1.65 × 0.75 × 0.09 m, broken into two pieces. This was completed by smaller slabs and rubble along the edges, especially in the W. and E. This slab projected 0.45 m outside the northern end, and below this was found a skeleton, Tomb M. H. 81.<sup>3</sup> On the bottom of the cist a partly defective skeleton of a mesocranial, about 40-years-old woman,<sup>4</sup> lying on her right

<sup>1</sup> Fürst, l. c., No. 11 FA, p. 21 f.

<sup>2</sup> A stone axe found close by lay above the level of the tomb and thus does not belong to the inventory of the tomb.

<sup>3</sup> Probably the remains of a slave-woman sacrificed to the dead.

<sup>4</sup> Fürst, l. c., No. 12 FA, p. 22 ff.

side with the head to the N.N.E., in contracted position, the trunk very much bent forward, the arms bent with one hand below the neck, the other in front of the trunk; the legs strongly contracted and very much drawn up to the chin. In the northern corner of the cist stood an M. H. vase (see below); in its filling were also found some vase sherds and an obsidian chip. Fig. 103.

Tomb M. H. 81. Square Q 3; Ter. III. Immediately below the part of the cover-slab projecting beyond the northern end-slab for Tomb M. H. 80 was found the very defective skeleton of a mesocranial, about 30-years-old woman.<sup>1</sup> Unfortunately no close investigation as to the position of the skeleton was made, or could be made, or into its relation to Tomb M. H. 80. A great deal speaks in favour of its being the remains of a slave-woman sacrificed to the woman buried in the last-mentioned tomb. No burial gifts.

Tomb M. H. 82. Square R 2; Ter. III. Square cist oriented N.W.—S.E., inside 0.68 m long, 0.4 m broad and 0.3 m deep. In the north-eastern side a slab  $0.3 \times 0.15$  m placed on edge as well as three cobble stones; in the south-western side two similar slabs measuring respectively  $0.45 \times 0.07$  and  $0.2 \times 0.06$  m; in the north-western end one of  $0.46 \times 0.32 \times 0.13$  m, and in the south-eastern end a similar one  $0.45 \times 0.37 \times 0.08$  m. Covered by two irregular slabs measuring respectively  $0.72 \times 0.44 \times 0.1$  and  $0.9 \times 0.3 \times 0.1$  m. About these were lying some minor slabs and rubble, especially in the N. W., where this re-inforcement of the cover-slabs extended about 0.4 m outside the end-slab; two of these minor slabs, lying outside the north-eastern side, constituted the cover for the cist of Tomb L. H. 11. On the bottom of the cist lay a rather defective skeleton of an about 8-years-old child<sup>2</sup> in contracted position, on the left side, with the head to the S.E., the legs strongly contracted (especially the right one) and drawn up. No burial gifts. Fig. 104.

Tomb M. H. 83. Square Q 3; Ter. III. Greatly damaged, square cist, constructed of slabs on edge, one of them at the same time forming the side-wall of Tomb M. H. 78. One of the slabs raised by flat stones laid under it. Covered with three slabs. In the cist a skeleton in contracted position. No burial gifts. On one of the cover-slabs lay the skeletal remains belonging to Tomb M. H. 79.

Tomb M. H. 84. Square R 2; Ter. III. Below Tomb L. H. 11 and 0.60 m lower than the upper edge of the south-eastern end-slab in Tomb M. H. 82, an earth-cut grave with the skeleton of a mesocranial young woman (?)<sup>3</sup> in contracted position, very much spoiled and damaged by the workers before it was noticed. No burial gifts.

Tomb M. H. 85. Square S 3; Ter. III. Earth-cut grave. Child's skeleton. No burial gifts.

<sup>1</sup> Fürst, l. c., No. 26 FA, p. 35.

<sup>2</sup> Fürst, l. c., No. 13 FA, p. 24.

<sup>3</sup> Fürst, l. c., No. 27 FA, p. 35 ff.

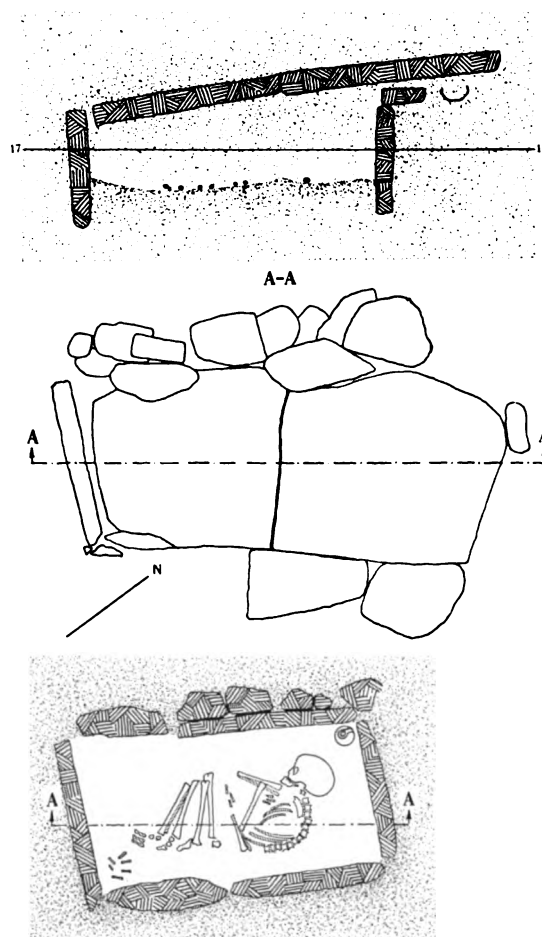


Fig. 103. Tomb M.H. 80.

Tomb M. H. 86. Square S 3; Ter. III. Demolished earth-cut grave. Only the very much spoiled cranium together with some bones left. No burial gifts.

Tomb M. H. 87. Square S 3; Ter. III. Earth-cut grave. A very defective child's skeleton. No burial gifts.

Tomb M. H. 88. Square S 1; Ter. III. Earth-cut grave. A very defective child's skeleton. No burial gifts.

Tomb M. H. 89. Square T 1; Ter. III. Earth-cut grave. A spoiled and damaged child's skeleton. No burial gifts.

Tomb M. H. 90. Square T 1; Ter. III. Earth-cut grave. A very much damaged child's skeleton together with bones of an older individual. No burial gifts.

Tomb M. H. 91. Square S 1; Ter. III. Earth-cut grave. A very much damaged child's skeleton. No burial gifts.

Tomb M. H. 92. Square Q 3; Ter. III. Earth-cut grave. A very defective skeleton of a child lying on a layer of shingle (in contracted position?). No burial gifts.

Tomb M. H. 93. Square S 1; Ter. III. Close to Tomb M. H. 72, an earth-cut grave with a very defective child's skeleton. No burial gifts.



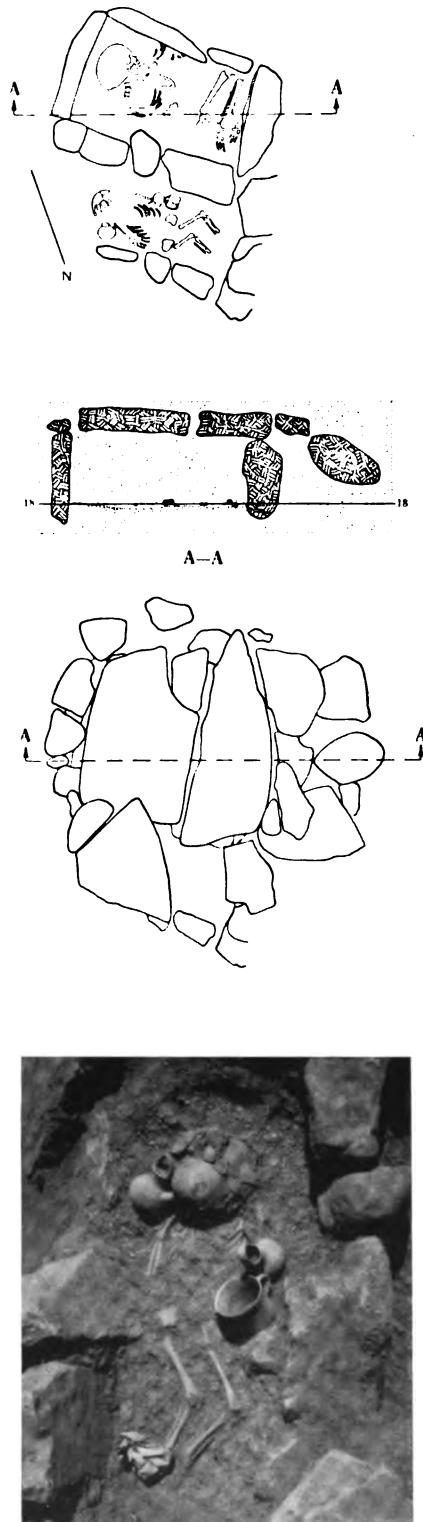


Fig. 104. Tombs M.H. 82 and L.H. 11.

Tomb M. H. 94. Square Q 2; Ter. III. Earth-cut grave. Child's skeleton. No burial gifts.

Tomb M. H. 95. Square Q 2; Ter. III. Earth-cut grave with a very defective child's skeleton. No burial gifts.

Tomb M. H. 96. Terrace II. Earth-cut grave very much demolished in the construction of a wall. Of the skeleton there remained only the pelvis, a shin-bone, a hand, a bit of the spine, of which no certain conclusions can be drawn as to the position of the skeleton. No burial gifts. Below this tomb was found Tomb M. H. 100.

Tomb M. H. 97. Terrace II. Rectangular cist oriented N.E.—S.W., inside 1.15 m long, 0.55 m broad and 0.3 m deep. The sides were built of flat stones laid upon one another in two courses. The north-eastern end consisted of a stone lying flat and measuring  $0.58 \times 0.3$  m, with a flat inside, the south-western one of a slab raised on edge and measuring about  $0.5 \times 0.1$  m. Cover-slabs missing. On the bottom of the cist lay the skeleton of a dolichocranial man<sup>1</sup> in contracted position, lying on his left side with the head towards the W.S.W., the right arm bent with the hand on the breast, the left more extended with the hand over the pudenda; the legs strongly contracted and drawn up. In the cist were found obsidian flakes or chips (see below), the longer one lying very close to the pelvis portion of the skeleton, the other up in the filling. The cist lay below Tomb Hell. 12. Fig. 105.

Tomb M. H. 98. Terrace II. Rectangular stone enclosure oriented N.E.—S.W., inside 0.95 m broad and 0.2 m deep, and at least 1.3 m long. The sides were formed of a course of small rubble; this course of stones was missing in the N.E., as were also the cover-slabs. The bottom was marked by a layer of shingle and fine gravel. On this rested the skeleton of a young, dolichocranial woman<sup>2</sup> in contracted position lying on her right side with the head to the E.N.E., the arms bent, with the lower arms stretched forward, the legs very much contracted and drawn up. The dead held an amphora (see below) in her hands. Other burial gifts: A bronze earring near each ear, a clay whorl and a bone-pin (see below) between the knees. In the filling of the cist E. H. and M. H. sherds as well as some animal bones and possibly of a human being. Fig. 106.

Tomb M. H. 99. Terrace II. An irregularly oblong cist oriented N.E.—S.W., inside 1.05 m long, 0.6 m broad and 0.3 m deep. The now defective sides consisted of irregular rubble. No cover slabs. On the bottom of the cist a skeleton of an about 30—40-years-old, mesocranial man,<sup>3</sup> lying in contracted position on his left side with the head towards the S. W., the right arm very much bent with the lower arm up against the neck, the left arm bent with the under-arm below the breast and the hand near the right elbow, the legs very much contrac-

<sup>1</sup> Fürst, l. c., No. 1 FA, p. 12 ff.

<sup>2</sup> Fürst, l. c., No. 2 FA, p. 14.

<sup>3</sup> Fürst, l. c., No. 3 FA, p. 14 f. The tomb is there erroneously located to Terrace III.



Fig. 105. Tomb M.H. 97.

ted and drawn up to the chin. No burial gifts. The tomb lay 0.80 m below Tomb P. G. 44.

Tomb M. H. 100. Terrace II. Shaft-tomb, rounded square, oriented W.S.W.—E.N.E., 1.5 m long, 0.8 m broad and 0.45 m deep. Covered by four irregular slabs, 0.1—0.15 m thick, together with some rubble in the edges and upper joints. In the filling, consisting of sand, some E. H. sherds. On the bottom of the shaft a skeleton of a powerfully built dolichocranial, about 60-years-old man,<sup>1</sup> lying in contracted position bent forward on his right side, with the head towards the E.N.E., the right arm bent with the under-arm below the stomach, the left arm slightly bent with the hand at the hip, the legs contracted and somewhat drawn up. No burial gifts. The tomb lay 0.75 m below Tomb M. H. 96. Fig. 107.

Tomb M. H. 101. Terrace II. Oblong cist oriented N.N.E.—S.S.W., inside 1.1 m long, 0.55 m broad and 0.45 m deep. The sides were built of flat stones laid in courses, the upper ones in the N. and W. being missing, likewise the whole southern end and the cover-slab.<sup>2</sup> On the bottom of the cist a skeleton of a young woman in contracted position, lying on its right side with the head towards the N.N.E., the left arm bent with the under-arm

below the back and the hand over the pudenda, the right underarm, strongly bent back with the hand below the right side, the legs very much contracted and drawn up. No burial gifts. Fig. 108.

Tomb M. H. 102. Terrace II. Earth-cut grave. The defective skeleton of a child in contracted position, lying on its left side, the head towards the S.W., the legs contracted and drawn up. Length of skeleton inside tomb 0.55 m. No burial gifts.

Tomb M. H. 103. Terrace II. Earth-cut grave. The very defective skeleton of an infant, covered by a clayey layer resembling clay-packing. No burial gifts.

Tomb M. H. 104. Square F 14. Square cist oriented N.—S., inside 1 m long, 0.5—0.7 m broad and 0.4 m deep. The sides built of stones laid in courses, the topmost course in the eastern side projecting. Cover-slabs missing. The bottom of the cist was marked by a 1 cm thick layer of coarse shingle. On this rested a skeleton in contracted position, lying on its right side with the head towards the N., the arms slightly bent, the left hand near the pudenda, the right one above the left under-arm, the legs

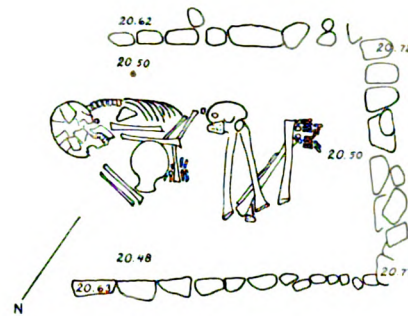


Fig. 106. Tomb M.H. 98.

<sup>1</sup> Fürst, l. c., No. 4 FA, p. 16 f.

<sup>2</sup> Fürst, l. c., No. 5 FA, p. 17 f.



very much contracted and drawn up. No burial gifts. Fig. 45.

Tomb M. H. 105. Square G 14. Earth-cut grave. A very defective skeleton of a child. No burial gifts.

Tomb M. H. 106. (see p. 50).

N.W., the arms bent with the hands over the abdomen, the legs strongly contracted and drawn up. No burial gifts.

Tomb L. H. 4. Square Q 3; Ter. III. Earth-cut grave. Defective child's skeleton, not in contracted position. No burial gifts. In the surrounding soil M. H. and L. H. sherds.

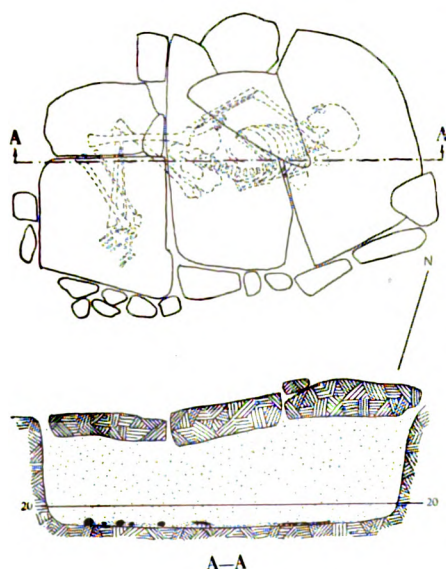


Fig. 107. Tomb M.H. 100.



Fig. 108. Tomb M.H. 101.

#### L. H. TOMBS

Tomb L. H. 1. Square G 7. Earth-cut grave. A greatly decomposed skeleton of a child (?). No burial gifts.

Tomb L. H. 2. Square G 7. Earth-cut grave. Remains of a skeleton with the head lying in a south-eastern direction. No burial gifts.

Tomb L. H. 3. Square C 3. Earth-cut grave. A rather defective child's skeleton covered by a portion of a Mycenaean vase (see below); contracted position, lying somewhat on its right side with the head towards the

Tomb L. H. 5. Square R 2; Ter. III. Earth-cut grave. Child's skeleton. No burial gifts. In the surrounding soil M. H. and L. H. sherds.

Tomb L. H. 6. Square Q 2; Ter. III. Earth-cut grave. Child's skeleton. No burial gifts. In the surrounding soil M. H. and L. H. sherds.

Tomb L. H. 7. Square Q 2; Ter. III. Earth-cut grave. Child's skeleton. No burial gifts. In the surrounding soil E. H., M. H., and L. H. sherds.

Tomb L. H. 8. Square R 3; Ter. III. Earth-cut grave.



Child's skeleton. No burial gifts. In the surrounding soil M. H. and L. H. Sherds.

Tomb L. H. 9. Square R 2; Ter. III. Earth-cut grave with a child's skeleton lying on top of Wall 4 of the House R. No burial gifts. The tomb lay in L. H. strata with some M. H. sherds mixed in the same.



Fig. 109. Tomb P. G. 1.

Tomb L. H. 10. In the S. dromos of Chamber-tomb I:1; cf. p. 159.

Tomb L. H. 11. Square R 2; Ter. III. Cist-tomb, situated close to the north-eastern side of Tomb M. H. 82, and, the same as the latter, oriented N.W.—S.E., inside 0.3 m broad and 0.3 m deep, the length having very likely been 0.7 m. The south-eastern end was missing. The north-western end and the north-eastern side built of rubble laid in one or more courses; the south-western constitutes

the north-eastern side in Tomb M. H. 82. Partly covered by two slabs measuring respectively  $0.5 \times 0.35$  m and  $0.3 \times 0.2$  m; between them very likely had been lying a third slab. On the bottom of the cist a rather defective skeleton of a child in contracted position, lying slightly on the left side with the head towards the S.E., the arms (at least the right one) extended along the sides, the legs somewhat contracted and drawn up. Near the right shoulder a flask with a spout, near the left arm a similar one and a cup (see below). Fig. 104.

Tomb L. H. 12. In the N. dromos of Chamber-tomb I:1; cf. p. 158.

### PROTO-GEOMETRIC TOMBS

Tomb P. G. 1. Square G 6. Irregularly square cist oriented N.N.W.—S.S.E., inside 1.4 m long, 0.35 m broad and 0.2 m deep, constructed of irregular, more or less flat, stones placed on edge, one at each end, the northern one fallen down, and five on each long-side. Covered with flat slabs. On the bottom of the cist a skeleton lying extended on the back with the head towards the S.S.E., the right arm stretched out along the side with the hand near the upper part of the thigh, the left bent with the hand — which is now however missing — over the pudenda. Just in front of the right shoulder lay a corroded bronze pin (?), and over the right arm a bottom fragment of an M. H. vase (see below). Fig. 109.

Tomb P. G. 2. Square I 8. Oval cist oriented N.E.—S.W., inside 0.58 m long, 0.32 m broad and 0.18 m deep. Built

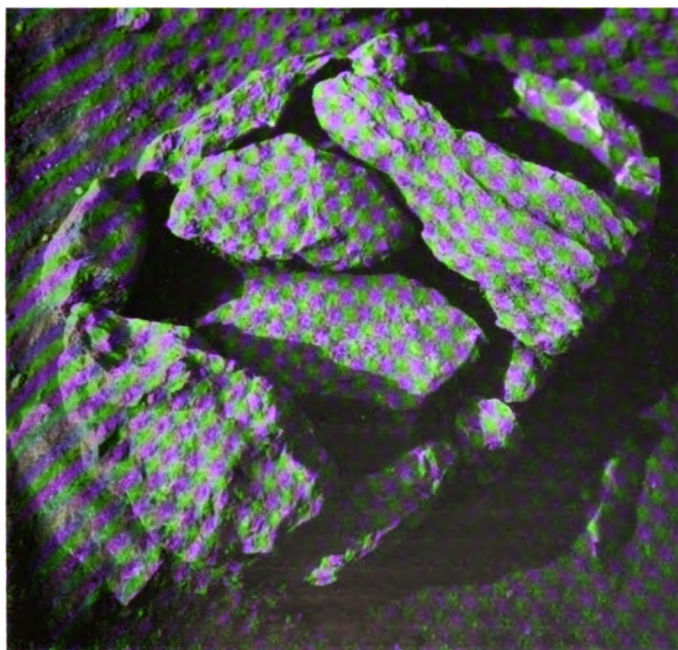


Fig. 110. Tomb P. G. 2.



of half a score more or less flat stones, large and small ones, placed on edge or raised obliquely. Covered with four similar stones or slabs, a fifth one farthest in the N.E. missing. On the bottom of the cist a rather defective child's skeleton, lying extended on its back with the head towards the N.E., the right arm somewhat bent, with the hand near the pudenda, the left one extended along the side, the hand missing; the right leg somewhat contracted, the left one straight. No burial gifts. Fig. 110.

Tomb P. G. 3. Square I 8. An irregularly square cist oriented N.E.—S.W., inside 1.50 m long, 0.3 m broad and 0.3 m deep. Built of more or less flat stones, in the

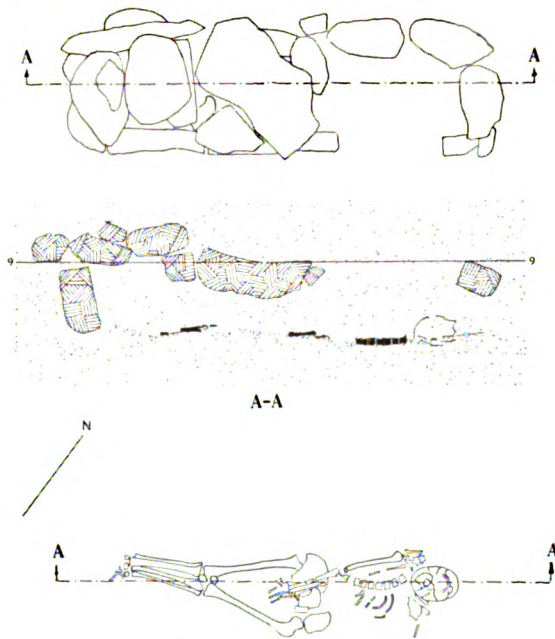


Fig. 111. Tomb P.G. 3.



Fig. 111A. Tomb P.G. 9.

south-western end two, the north-eastern end missing, in the north-western side five, in the south-eastern one four (one or two missing). The south-western part covered with seven or eight similar stones or slabs, the largest measuring  $0.6 \times 0.3 \times 0.15$  m; the north-eastern part was now without any cover-slabs. On the bottom of the cist the skeleton of a mesocranial, old woman,<sup>1</sup> lying stretched out on the back, the right arm extended with the hand over the pudenda, the left arm missing. Below the bones of the right hand was found a bronze ring (see below). Fig. 111.

Tomb P. G. 4. Square I 9. At the same, or perhaps a slightly lower, level than the uppermost L. H. course of the wall a small, square cist. In one end and side each a slab stood on edge, the other end consists of a piece of a pithos placed on edge. Cover-slabs missing. The bottom of the cist was marked by a thick layer of shingle. On this the very defective remains of a child's skeleton. The filling of the cist consisted of lumpy clay in which were found some Mycenaean sherds as well as some charcoal particles mixed in. No burial gifts.

Tomb P. G. 5. Square I 9. On the same, or slightly deeper, level of the uppermost L. H. course of the wall a small, square cist. In one end and side each a slab raised on end, in the other side two such slabs, the other end missing. No cover-slabs. The bottom of the cist was marked by a couple of cm thick layer of shingle. On this lay the very defective remains of a child's skeleton. The filling of the cist consisted of lumpy clay in which were found some Mycenaean sherds as well as some charcoal particles mixed in. No burial gifts.

Tomb P. G. 6. Square H 8. Irregularly square cist oriented E.N.E.—W.S.W., inside 0.5 m long, 0.25 m broad and 0.15 m deep. In the eastern end a slab or oblong stone 0.29 m long and 0.10 m thick, in the western one two similar slabs measuring respectively  $0.3 \times 0.1$  m and  $0.21 \times 0.08$  m (these two possibly not in their original position), in the other side a slab,  $0.41 \times 0.09$  m, in the southern one a slab,  $0.31 \times 0.1$  m. Possibly there was originally another slab in each side. No cover-slabs. On the bottom of the cist the rather defective skeleton of an infant, probably in contracted position, lying somewhat on the right side with the head to the E. N. E., the arms slightly bent with the right hand over the abdomen, the left hand missing; the legs probably contracted and drawn up. No burial gifts. In the filling some small charcoal particles.

Tomb P. G. 7. Square G 8. Cist, damaged, containing remains of a child's skeleton. No burial gifts. In the filling some charcoal particles.

Tomb P. G. 8. Square F 8. Above the E. stair of House D, and at right angles to its longitudinal stretch, a very much damaged child's skeleton. No burial gifts.

Tomb P. G. 9. Square H 8. Small, square cist. Built

<sup>1</sup> Fürst, l. c., No. 34 FA, p. 117.



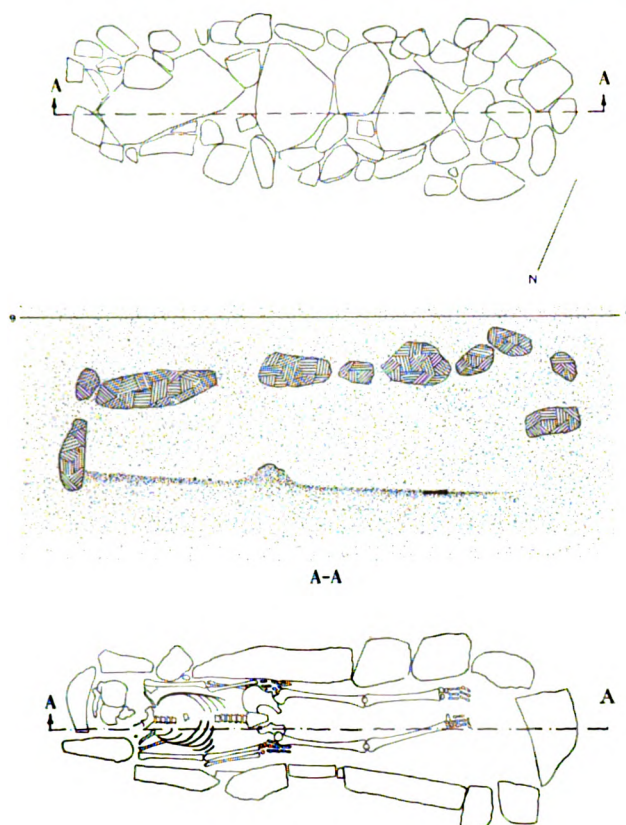


Fig. 112. Tomb P.G. 10.

of slabs or oblong stones, one in each end, two in one side, three in the other. Cover-slabs missing. On the bottom of the cist a rather defective child's skeleton. On top of this two cups and a trefoil jug (fig. 111 A).

Tomb P. G. 10. Square H 8. Dug down into an L. H. stratum, an irregularly square cist, oriented E.N.E.—W.S.W., inside 1.78 m long, 0.26 to 0.45 m broad, and 0.30 m deep. In each end a cobble stone with flat or smooth inside, in the northern side four up-ended slabs, the largest 0.5 m long and 0.1 m thick, and four stones, in the southern side such a slab 0.65 m long and 0.13 m thick, and five cobble stones. Covered with several slabs, the largest measuring  $0.6 \times 0.25 \times 0.15$  m, and some small and large rubble which nevertheless did not rest direct on the side and end stones, but lay on soil at a height of 0.1 m above its upper edge. On the bottom of the cist a skeleton, lying extended on its back with the head to the E.N.E., the arms stretched out along the sides, the left hand near, the right on top of, the upper part of the thigh. On the right shoulder was found an iron pin with a bronze head; close to the left upper arm a whorl made of bone (see below). Fig. 112.

Tomb P. G. 11. Square K 4—5. Across Wall 12. Square cist oriented N.N.W.,—S.S.E., inside 1.75 m long, 0.33

to 0.5 m broad, and 0.3 m deep. In the northern end a slab placed on edge, measuring  $0.4 \times 0.32 \times 0.14$  m, in the southern end a similar one size  $0.42 \times 0.37 \times 0.15$  m, in the eastern side four, originally five, such slabs,  $0.4 \times 0.17$  to  $0.3 \times 0.09$  m, in the western side also four, originally five or six similar slabs,  $0.57 \times 0.1$  to  $0.21 \times 0.1$  m. Covered with five irregular slabs, the largest  $0.7 \times 0.31 \times 0.17$  m, the smallest  $0.34 \times 0.23 \times 0.07$  m. On the bottom of the cist a skeleton lying stretched out on its back, with the head to the S.S.E., the arms stretched along the sides, the right hand near, the left one on top of, the upper part of the thigh. No burial gifts. Fig. 113.

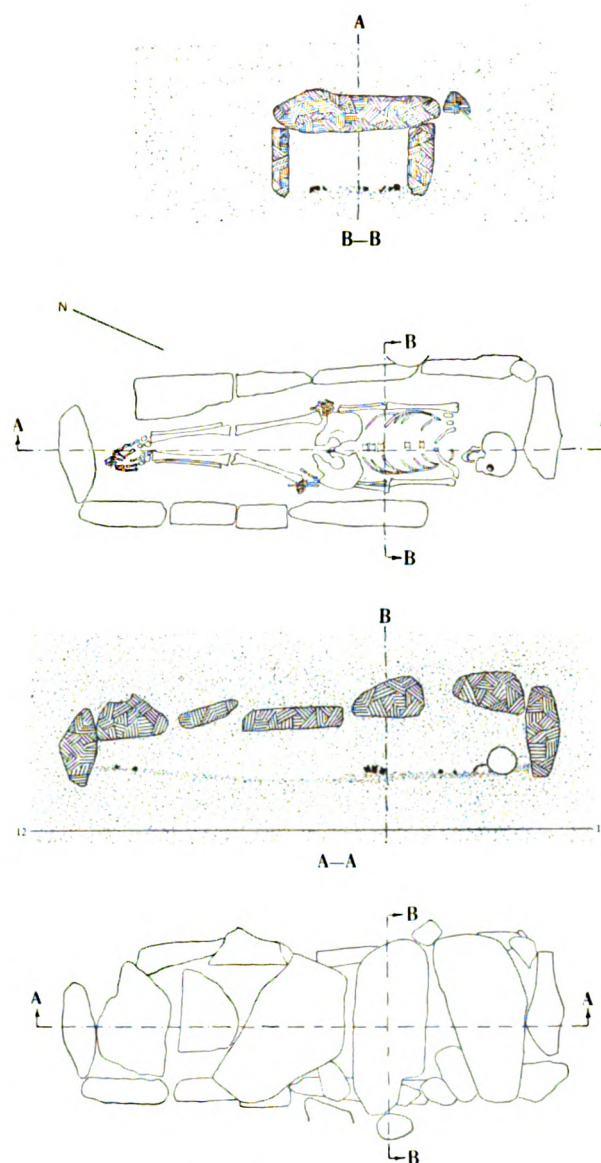


Fig. 113. Tomb P.G. 11.



Tomb P. G. 12. Square L 5. Square cist oriented N.W.—S.E., inside 1.43 m long, 0.43 m broad, and 0.3 m deep. In the north-western end a slab placed on edge, measuring  $0.35 \times 0.22 \times 0.13$  m, in the south-eastern an up-ended slab measuring  $0.3 \times 0.28 \times 0.09$  m, in the north-eastern side — apart from some rubble — four similar slabs,  $0.4 \times 0.13$  to  $0.28 \times 0.12$  m, in south-western only two,  $0.3 \times 0.07$  and  $0.27 \times 0.08$  m, otherwise small rubble. Covered with six irregular slabs, the largest  $0.53 \times 0.2 \times 0.12$  m, the smallest  $0.33 \times 0.15 \times 0.12$  m, besides some rubble over cracks and openings. On the bottom of the cist, in its south-eastern part, a somewhat defective skeleton in contracted position, lying somewhat on its right side, with the head to the S. E., the left arm extended along the side, the right one slightly bent with the hand over the pudenda, the legs pretty strongly contracted and — especially the right one — very much drawn up to the chin. On each shoulder a bronze pin with the point directed towards the breast, and on one bone of the right hand a bronze ring (see below). The north-western part of the cist was empty, apart from a stone lying in the northern corner. Fig. 114.

Tomb P. G. 13. Square H 3. Earth-cut grave. Very defective child's skeleton covered by some coarse P. G. vase-sherds. No burial gifts.

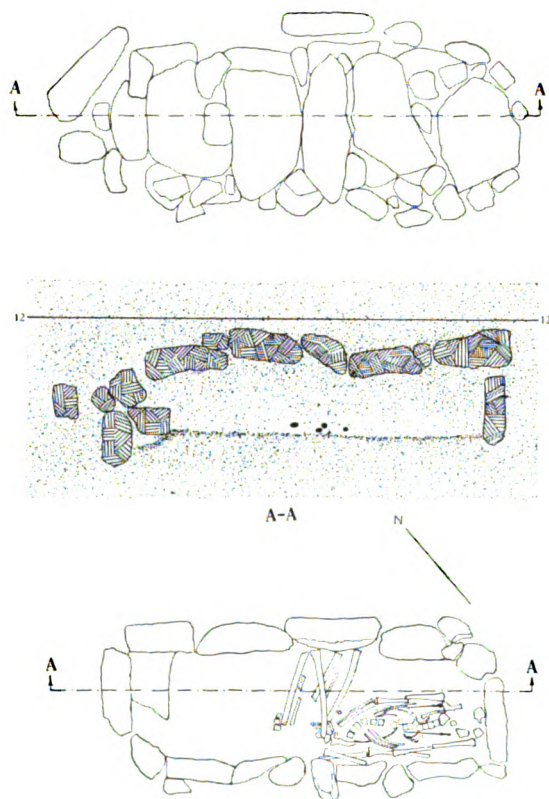


Fig. 114. Tomb P.G. 12.

Tomb P. G. 14. Square K 4. Earth-cut grave. Very defective child's skeleton. No burial gifts.

Tomb P. G. 15. Square K 4. Earth-cut grave. A skeleton of an adult lying stretched out on the back with the head to the S., the hands over the pudenda. No burial gifts.

Tomb P. G. 16. Square D 9. Cist, built into Wall 80. Cover-slabs missing. The skeleton was almost altogether disintegrated or demolished. No burial gifts.

Tomb P. G. 17. Square F 8. Rectangular cist oriented W.N.W.—E.S.E., inside 1.5 m long, 0.3 m broad and 0.2 m deep. In the western end a slab raised on edge, with a flat inside and measuring 0.82 m in length, in the northern end five such slabs, the largest 0.4 m long and 0.11 m thick, in the southern one four such slabs and a piece of rubble. Covered chiefly with small rubble. On the bottom of the cist a skeleton of a mesocranial, older man (?),<sup>1</sup> lying stretched on the back, with the head to the E.S.E. Right arm bent with the hand on the breast; left arm bent with the hand above the hip. Near the left shoulder a fragmentary iron object (probably an iron pin).

Tomb P. G. 18. Square D 8. Square cist oriented N.W.—S.E., inside 0.85 m long, 0.3 m broad, and 0.3 m deep. In each end an oblong slab placed on edge, with flat insides, in the south-western side two similar stones, the largest 0.45 m long and 0.13 m thick, in the north-eastern side three such slabs, the largest 0.45 m long and 0.17 m thick. Covered with two slabs measuring respectively  $0.41 \times 0.37 \times 0.21$  m and  $0.41 \times 0.16 \times 0.14$  m, and one slab  $0.41 \times 0.34 \times 0.09$  m. On the bottom of the cist some trifling remains of a skeleton. In the southern corner one cup and two jugs (see below) and some pieces of twisted bronze wire and particles of charcoal. Fig. 115.

Tomb P. G. 19. Square D 9. Very much damaged cist oriented N.E.—S.W., the end parts missing, but the length seems to have been 0.9 m, the breadth was 0.25 m and the depth 0.15 m. In the south-eastern side three slabs were left now, these were oblong, placed on edge and had smooth insides, the largest was 0.27 m long and 0.08 m thick. In the north-western side were only two such slabs left, the largest 0.28 m long and 0.09 m thick. Only one of the cover-slabs was left, lying (in an undisturbed condition?) above the S.E. end of the cist, 0.53 m long and 0.27 m broad. On the bottom of the cist a defective and partly disturbed child's skeleton lying stretched out on the back with the head to the N.E. (lower part of legs missing). No burial gifts.

Tomb P. G. 20. Square E 10. On Wall 77. Square cist oriented N.E.—S.W., inside 1.17 m long, 0.35 m broad, and 0.2 m deep. In each end a slab placed on edge measuring respectively  $0.3 \times 0.27 \times 0.1$  m and  $0.29 \times 0.21 \times 0.05$  m, in the south-eastern side four slabs placed on edge, the largest measuring 0.41 m in length and 0.08 m in thickness; in the north-western side two — originally three — the largest 0.57 m long and 0.13 m thick. Covered by four

<sup>1</sup> Fürst, l. c., No. 32 FA, p. 114 ff.





Fig. 115. Tomb P.G. 18.

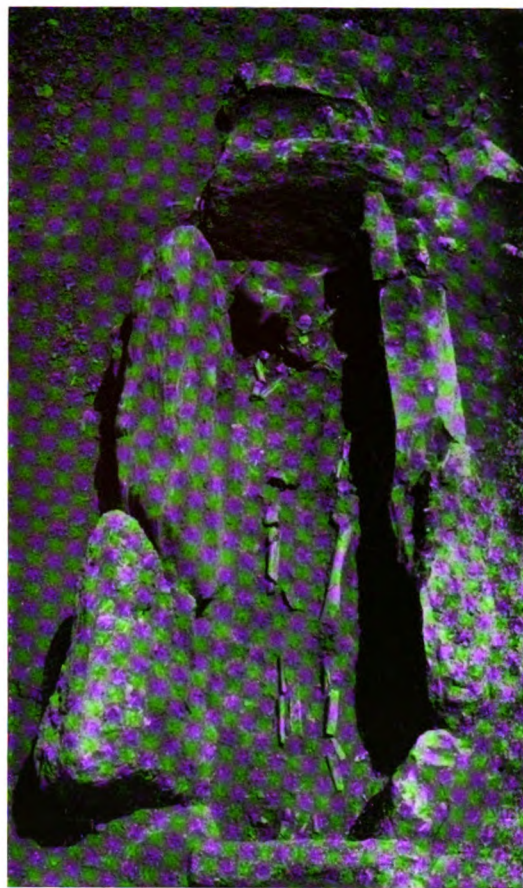


Fig. 116. Tomb P.G. 20.

slabs or flat stones, the largest  $0.42 \times 0.37 \times 0.15$  m. On the bottom of the cist a very defective skeleton spoiled by tree-roots, lying extended on the back with the head to the N.E. No burial gifts. Fig. 116.

Tomb P. G. 21. Square E 10. Square cist oriented E.N.E.—W.S.W., inside 0.62 m long, 0.23 m broad, and 0.25 m deep. In the western end two slabs placed on top of each other, in the eastern end a slab measuring  $0.36 \times 0.28 \times 0.07$  m placed on edge, in the northern side two such slabs, the largest 0.37 m long and 0.07 m thick, in the southern one likewise two, the largest 0.37 m long and 0.1 m thick. Covered with two slabs measuring respectively  $0.34 \times 0.35 \times 0.09$  m, and  $0.32 \times 0.31 \times 0.1$  m. Openings and cracks packed with small slabs and rubble. On the bottom of the cist some remains of a child's skeleton greatly spoiled by tree-roots. This had evidently been lying extended on the back with the head to the E.N.E. No burial gifts.

Tomb P. G. 22. Square F—G 11. Earth-cut grave. A somewhat defective skeleton lying stretched out on its back with the head to the E., the arms extended along the sides, with the hands close to the upper part of the

thighs. Covered with something like 10 pithos fragments of which three were decorated, and some rubble. No burial gifts. Fig. 117.

Tomb P. G. 23. Square E 9. Square cist oriented N.W.—S.E., inside 0.54 m long, 0.30 m broad, and 0.20 m deep. Built of more or less flat slabs placed on edge, one in each end, respectively  $0.28 \times 0.25 \times 0.11$  m and  $0.23 \times 0.24 \times 0.11$  m, in the north-eastern side two, the largest 0.38 m long and 0.08 m thick, in the south-western likewise two, the largest 0.52 m long and 0.06 m thick. Covered with a slab  $0.35 \times 0.25 \times 0.10$  m and two oblong slabs measuring respectively  $0.37 \times 0.19 \times 0.14$  m and  $0.37 \times 0.19 \times 0.13$  m, together with some rubble. On the bottom of the cist a very defective child's skeleton, in somewhat contracted position, lying on its back with the head to the N.W., the arms slightly bent along the sides (the hands missing), the legs somewhat contracted and drawn up to the right. No burial gifts. In the filling composed of brown soil were noticed some charcoal particles.

To the W.S.W. of the cist and very close to it (0.1 m away) was found on the same level a slab which was found to belong to a stone enclosure of altogether 6 such stones,



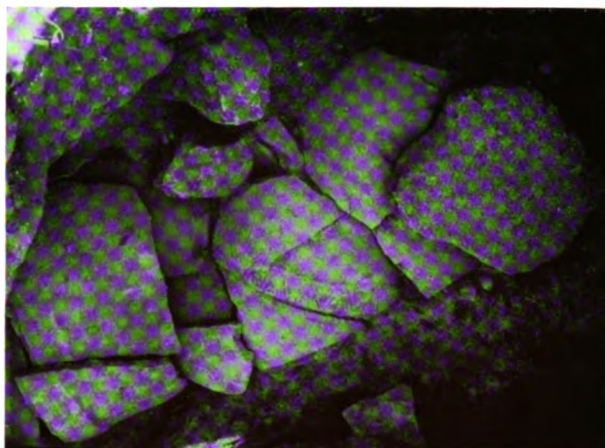


Fig. 117. Tomb P. G. 22.

built around the central stone. The dimensions of the stone enclosure were  $0.58$  (N.E.—S.W.)  $\times$   $0.43$  m, the central stone measured  $0.27 \times 0.17$  m. No finds in the same. This has been interpreted as a »grave-altar«.  $0.60$  m east of the cist a similar »grave-altar« was found, in this case of slabs placed on edge and otherwise delimited by a rounded stone enclosure of rubble, laid in two courses measuring  $0.8$  (N.—S.)  $\times$   $0.63$  m. Amongst the rubble lay two grindstones. The soil close to the stone enclosure was packed hard and contained charcoal particles. Figs. 118 and 118 A.

Tomb P. G. 24. Square E 9. Oblong cist oriented N.W.—S.E., inside  $1.30$  m long,  $0.35$  m broad and  $0.30$  m deep. Built of several more or less flat slabs or stones, placed on edge or laid in courses. No cover-slabs. On the bottom of the cist a skeleton lying stretched out on its back with the head to the N.W., the arms extended along the sides, the right hand near the upper part of the thigh, the left near the pudenda. Near the right upper arm, just above the elbow, was found a small astragal (see below). The filling of the cist consisted of hard, grey, somewhat clayey soil, which, however, near the head and above the spine was loose and brown. In the earth-filling were found some Mycenaean sherds. Below this cist's south-western side lay the north-eastern side in Tomb P. G. 25. Fig. 119.

Tomb P. G. 25. Square E 9. Square cist situated immediately S.W. of Tomb P. G. 24, but at a deeper level, so that its N.W. side lay below the S.W. side of the latter, and one of its side-slabs rested on one of the former's cover-slabs. Oriented N.W.—S.E., inside  $1.65$  m long,  $0.45$  m broad, and  $0.25$  m deep. In the N.W. end an oblong slab placed on edge, measuring  $0.70(?) \times 0.32 \times 0.32$  m, in the S.E. end two similar ones, the largest  $0.30 \times 0.35 \times 0.16$  m, in the N.E. side three slabs placed on edge, the largest  $0.60$  m long and  $0.16$  m thick, together with a smaller one. The S.W. side was only preserved to a length of  $0.98$  m, with three slabs, the largest  $0.33$  m long and  $0.11$  m thick. Covered with six oblong slabs, the largest  $0.70 \times 0.35 \times 0.16$  m. Openings and cracks packed with small slabs and



Fig. 118. Tomb P. G. 23 with grave-altar.



rubble. On the bottom of the cist, marked by a layer of coarse shingle, a skeleton lying stretched out on its back with the head to the N.W., the arms extended along the sides, with the hands near the upper part of the thighs: the right foot resting on top of the left. Near the head stood three vases (see below). The cist was filled with brown earth. Close to the N.W. end of the cist was found a staghorn embedded in a layer of fire-remains and ashes. Burial sacrifice? Fig. 119.

Tomb P. G. 26. Square F 11. Very much spoiled and demolished cist, close to, and alongside, Tomb P. G. 27. No cover-slabs. On the bottom of the cist were found very trifling skeletal remains, together with two vases (see below). Fig. 119 A.

Tomb P. G. 27. Square F 11. Close to, and alongside, Tomb P. G. 26. A defective, square cist. One side and the cover-slabs missing. On the bottom of the cist some remains of a very much spoiled skeleton together with four vases and a button (see below). Fig. 119 A.

Tomb P. G. 28. Square E 10. Square cist oriented E.N.E.—W.S.W., inside about 1 m long, 0.3—0.4 m broad, and 0.2 m deep. In the eastern end an oblong stone or slab placed on edge,  $0.28 \times 0.24 \times 0.11$  m, in the western one a similar one (clearly somewhat pushed into the cist)  $0.31 \times 0.21 \times 0.12$  m, in the northern side three, the largest  $0.46$  m long and  $0.14$  m thick; in the south



Fig. 118 A. Grave-altar near Tomb P.G. 23.

also three, the largest  $0.36$  m long,  $0.15$  m thick; together with two smaller ones. Covered by four oblong slabs, the largest  $0.57 \times 0.27 \times 0.09$  m, together with some smaller rubble over openings and cracks. On the bottom of the cist a rather defective skeleton in contracted position, lying somewhat on its right side with the head to the E.N.E., the arms extended along the sides with the left hand close

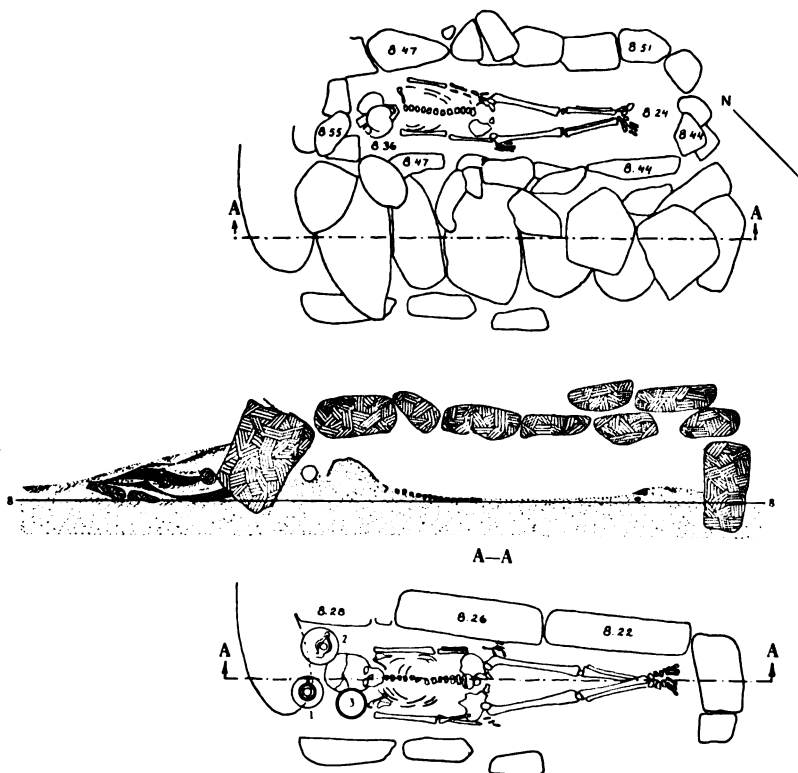


Fig. 119. Tombs P.G. 24 and 25.





Fig. 119A. Tombs P.G. 26 and 27.

to the upper part of the thigh (the right hand missing), the legs somewhat contracted and drawn up to the right. No burial gifts.

Tomb P. G. 29. Square F 11. Oblong, somewhat defective cist oriented E.S.E.—W.N.W., inside 0.71 m long, 0.38 m broad, and 0.20 m deep. Built of oblong slabs placed on edge and also some rubble (including a grind-stone), the largest slab measuring  $0.26 \times 0.24 \times 0.1$  m, one in each end, two in the northern side and three in the southern. But the sides were defective at the eastern end. Covered with four similar slabs or stones, the largest measuring  $0.42 \times 0.32 \times 0.10$  m. In the cist were not found any skeletal remains, in fact no finds at all were made. Cenotaph? At a depth of 0.2 to 0.3 m below the eastern end of the tomb was noticed a thick layer of ashes, and besides these lay a large stone with a flat upper side.

Tomb P. G. 30. Square F 10. Square cist oriented N.W.—S.E., inside 0.55 m long, 0.25 m broad, and 0.15 m deep. In the north-western end a slab raised on edge,  $0.30 \times 0.23 \times 0.04$  m, in the south-eastern one a similar slab,  $0.35 \times 0.25 \times 0.09$  m, in the south-western side two, the larger 0.33 m long and 0.08 m thick, in the north-eastern one also two, the larger being 0.28 m long and 0.07 m thick, together with a smaller stone. Only in the south-eastern part of the cist was there any cover, viz. a slab measuring  $0.55 \times 0.26 \times 0.06$  m. On the bottom of

the cist some very trifling skeletal remains. No burial gifts.

Tomb P. G. 31. Square F 10. Earth-cut grave located in Wall 76. A somewhat defective skeleton of a mesocranial, about 40-years-old man<sup>1</sup> in contracted position, lying somewhat on his right side with the head to the S.E., the right arm rather strongly bent, the hand, which was missing, should have been lying on the breast, left arm bent with the hand on the abdomen, the legs, especially the left one, contracted and somewhat drawn up. No burial gifts.

Tomb P. G. 32. Square F 8. Very much demolished, small cist, with only three edging-slabs preserved. This contained some trifling skeletal remains. No burial gifts.

Tomb P. G. 33. Square F 9. Earth-cut grave. A very defective skeleton, spoiled by the workers before it was noticed.

Tomb P. G. 34. Square I 10. A square cist oriented E.—W., inside 0.70 m long, 0.26 m broad and 0.20 m deep. Built of slabs placed on edge, one in each end respectively  $0.3 \times 0.22 \times 0.05$  m and  $0.24 \times 0.25 \times 0.05$  m, in the northern side three such slabs, the largest 0.28 m long and 0.05 m thick; in the southern side likewise three, the largest 0.25 m long and 0.04 m thick. The slabs in the ends were

<sup>1</sup> Fürst, l. c., No. 25 FA, p. 34.



on the outside propped up with some rubble. Covered with three slabs, the largest  $0.32 \times 0.27 \times 0.09$  m, a fourth over the eastern end of the cist was missing. On the bottom of the cist a rather defective child's skeleton, lying stretched out somewhat on the right side with the head to the E., the right upper arm extended along the side, one hand over the pudenda (the other missing), the legs stretched out and the left one crossed over the right. Near the feet lay some fish (?) bones. In the filling of the cist were plenty of charcoal particles. Fig. 120.

Tomb P. G. 35. Square H 10. Square cist oriented N.E.—S.W., inside 0.56 m long, 0.20 m broad, and 0.20 m deep. In each end a slab placed on edge, with flat inside, respectively 0.27 m long and 0.06 m thick, and 0.27 m long and 0.07 m thick; in the north-western side two similar slabs, the larger 0.31 m long and 0.10 m thick, together with a smaller stone in the joint between them. In the south-eastern side likewise two such slabs, the longer 0.38 m long and 0.10 m thick; in the joint between this side and the north-eastern end a piece of faintly fired brick had been wedged in. No cover-slabs. On the bottom of the cist a very defective skeleton of a child, this skeleton being seriously damaged by tree-roots. The head was to the N.E., and to judge from all appearances

the corpse had been lying extended on its back, with at least the right arm extended along the side. Near the head stood two vases (see below). The filling of the cist consisted of fine sand. Fig. 121.

Tomb P. G. 36. Square G 10. Square cist oriented N.E.—S.W., inside 0.71 m long, 0.25 m broad and 0.15 m deep. In each end a slab placed on edge measuring respectively  $0.33 \times 0.27 \times 0.09$  m and  $0.28 \times 0.24 \times 0.07$  m, in the south-eastern side three such slabs, the largest 0.31 m long and 0.05 m thick, in the north-western side two similar slabs, the larger 0.37 m long and 0.06 m thick, together with a smaller slab. Covered by five oblong slabs, the largest measuring  $0.37 \times 0.16 \times 0.13$  m. On the bottom of the cist the very defective skeleton of a child, very much spoiled by tree-roots, the skeleton lying extended on the back with the head to the N.N.E. (i. e. diagonally in the cist), the left upper arm extended along the side, the fore-arm with the hand as well as the entire right arm missing. Between the feet stood a cup (see below). In the filling, consisting of fine sand, occurred some charcoal particles. Figs 122. 123.

Tomb P. G. 37. Square G 11. Square cist oriented N.W.—S.E., inside 0.67 m long, 0.33 m broad and 0.15 m deep. In the north-western end an oblong slab raised

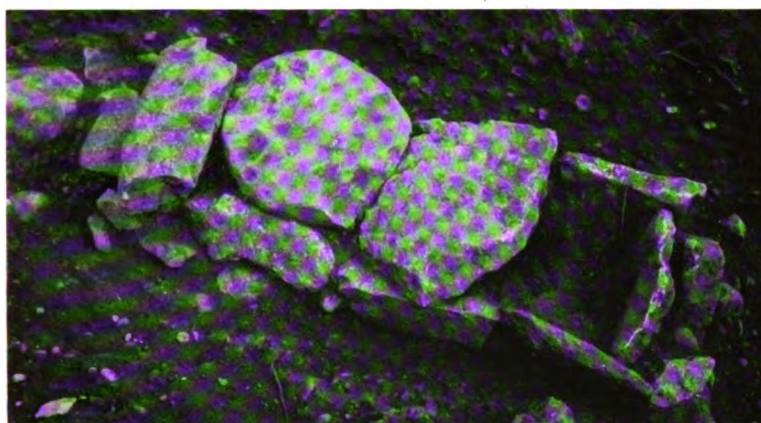


Fig. 120. Tomb P.G. 34.



Fig. 121. Tomb P.G. 35.





Fig. 122. Tombs P. G. 36 and 37.

on edge, measuring  $0.32 \times 0.2 \times 0.08$  m, in the south-eastern one a similar one,  $0.35$  m long and  $0.14$  m thick, together with a smaller slab behind; in the north-eastern side three such slabs, the largest  $0.30$  m long and  $0.09$  m thick, in the south-western side likewise three, the largest  $0.32$  m long and  $0.09$  m thick. Covered with two slabs measuring respectively  $0.47 \times 0.24 \times 0.11$  m and  $0.37 \times 0.3 \times 0.12$  m. On the bottom of the cist a child's skeleton rather defective and spoiled by tree-roots, lying extended on the back with the head to the S.E., the arms somewhat bent along the sides with the right hand near the upper part of the thigh (the left hand was missing). Near the left foot lay a cup (see below) and near the right upper arm an animal bone. The filling of the cist consisted of fine sand. Figs. 122, 124.

Tomb P. G. 38. Square G 10. Square cist oriented N.E.—S.W., inside  $1.38$  m long,  $0.35$  m broad and  $0.3$  m deep. Built of oblong slabs and stones placed on edge, and covered with six such, the largest measuring  $0.57 \times 0.42 \times 0.13$  m. Openings and cracks packed with rubble. On the bottom of the cist the skeleton of an adolescent person, lying stretched out on the back with the head to the N.E., the arms extended along the sides, the right hand over the upper part of the thigh, the left below the hip. No burial gifts. The filling of the cist consisted of a compact layer of hard clay, in which also the skeleton was embedded; below the cover-slabs was an empty space of  $0.05$  m.

Tomb P. G. 39. Square K 12. Square cist oriented N.N.W.—S.S.E., inside  $1.2$  m long,  $0.33$  m broad and  $0.3$  m deep. In each end a slab placed on edge, measuring respectively  $0.33$  m in breadth,  $0.38$  m in height and  $0.12$  m in thickness, and  $0.39$  m in length,  $0.42$  m in height and  $0.1$  m in thickness; in the western side four such slabs, the largest  $0.37$  m long and  $0.13$  m thick, together with a smaller slab; in the eastern side two such slabs,

the larger being  $0.61$  m long and  $0.14$  m thick, besides some rubble. Covered with six irregular slabs, the largest  $0.53 \times 0.28 \times 0.15$  m, one of the slabs being placed just outside the northern end; openings and cracks packed with rubble. On the bottom of the cist a rather defective skeleton of an adolescent person lying extended on the back with the head to the S.S.E., the left arm and the right upper arm stretched along the sides (the right forearm and both hands missing). Near the left shoulder lay a tortoise shell. The filling of the cist consisted of fine sand and contained plenty of small shells. Partly below this tomb, P. G. 42.

Tomb P. G. 40. Square L 12. Square cist oriented N.—S., inside  $1.83$  m long,  $0.43$  m broad and  $0.35$  m deep. In the northern end a slab placed on end, measuring  $0.41 \times 0.39 \times 0.11$  m, in the southern end a similar slab, measuring  $0.36 \times 0.46 \times 0.12$  m, as well as a couple of smaller stones in the south-west corner; the sides are constructed of similar slabs, the largest  $0.68$  m long, and  $0.09$  m thick, but also of flat rubble laid in a couple of courses. Covered with six irregular slabs, the largest  $0.93 \times 0.59 \times 0.14$  m. Openings and cracks packed with smaller slabs and rubble. On the bottom of the cist a skeleton of a grown-up person lying stretched out on its back with the head to the S., the right arm straight along the side, with the hand near the upper part of the thigh, the left arm lay slightly bent along the side with the hand over the upper part of the thigh. On the right shoulder lay an iron knife (see below), with the handle near the head and point on the lower part of the upper arm, and below the right shoulder-blade lay an iron pin (see below).

Tomb P. G. 41. Square I 12. Square cist oriented E.N.E.—W.S.W., inside  $0.55$  m long,  $0.27$  m broad and  $0.20$  m deep. In the western end a slab placed on edge,  $0.41 \times 0.36 \times 0.11$  m, in the eastern one three flat stones laid in two courses, in the northern side a slab placed on



edge, 0.33 m long and 0.09 m thick, in the southern side a similar slab, 0.42 m long and 0.10 m thick, together with a smaller, obliquely placed slab. Covered with three slabs, the largest  $0.43 \times 0.34 \times 0.07$  m, one of them projecting 0.19 m beyond the eastern end-slab. On the bottom of the cist, in its eastern part, lay a very defective skeleton of a very small infant with the head to the E, possibly in contracted position. No burial gifts.

Tomb P. G. 42. Square K 12. Partly below Tomb P. G. 39 and at a 0.50 m lower level an earth-cut grave with traces of a greatly demolished skeleton. No burial gifts. The tomb may perhaps belong to the L. H. period.

Tomb P. G. 43. Terrace II. Square cist oriented N.N.E.—S.S.W., inside 1.55 m long, 0.3 m broad and 0.3 m deep. The sides are built of slabs placed on edge and some flat stones laid in courses. The northern end consisted of a slab placed on edge, measuring  $0.35 \times 0.10$  m; the southern one was of a more irregular slab  $0.25 \times 0.15$  m, with flat inside. On top of the central portion of the cist was an irregular slab,  $0.7 \times 0.25$  m. The other cover-slabs were missing. On the bottom of the cist a skeleton lying stretched

out somewhat on the left side, with the head to the S.S.W. the left arm extended along the side, the right one somewhat bent with the hand over the pudenda, the legs somewhat contracted. Below the right shoulder a bronze pin, below the left one an iron pin with a bronze head. In the filling were found a flint chip and a lot of potsherds, (See below). Figs. 125, 126.

Tomb P. G. 44. Terrace II. Very defective cist oriented N.E.—S.W. Only some large and smaller rubble in the sides preserved. On the bottom a skeleton, lying extended on its back with the head to the S.W., the arms slightly bent with the hands over the pudenda. On the left shoulder a bronze pin, near the right one a couple of iron fragments (pin?), on the ring-finger of the right hand a bronze ring, another bronze ring on the ring-finger of the left hand (see below). The tomb lay 0.80 m above Tomb M. H. 99.

Tomb P. G. 45. Square E 10. Small cist. Cover-slabs missing. The cist contained scanty skeletal remains and a heavy layer of ash. No burial gifts.

Tomb P. G. 46. Square G 8. Earth-cut grave, containing a skeleton.

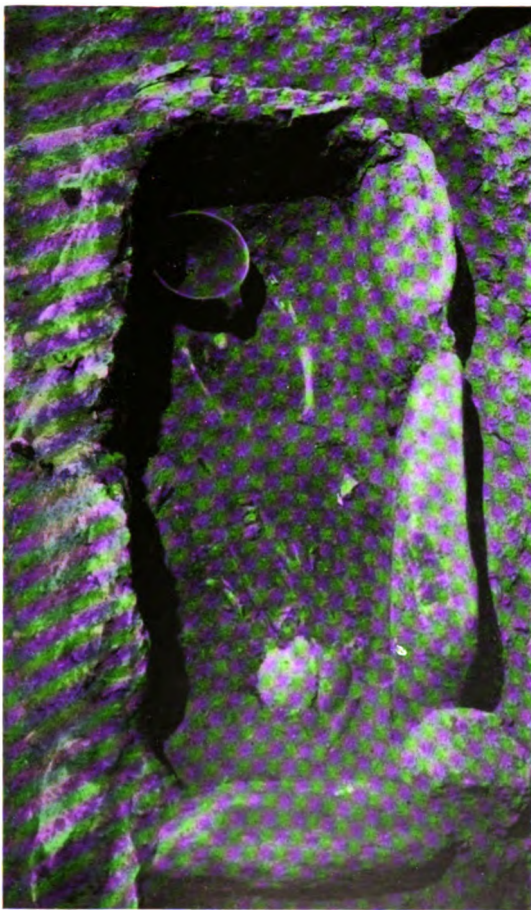


Fig. 123. Tomb P. G. 36.



Fig. 124. Tomb P. G. 37.



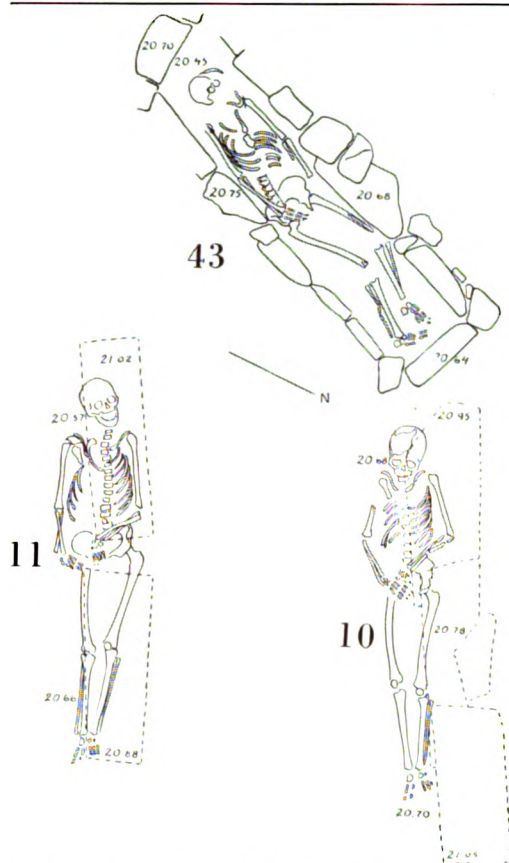


Fig. 125. Tombs P.G. 43 and Hell. 10 and 11.



Fig. 126. Tombs P.G. 43 and Hell. 10 and 11.

### HELLENISTIC TOMBS

Tombs Hell. 1—3 are situated on Mt Barbouna, see p. 194.

Tomb Hell. 4. Square T 4; Ter. III. Irregularly oblong cist oriented N.E.—S.W., inside 1.15 m long, 0.35 m broad and 0.3 m deep. In the north-western side a slab placed on edge,<sup>1</sup> 0.73 × 0.17 m and some smaller rubble, in the other side, apart from some rubble, a similar slab 0.58 × 0.10 m, on the latter's outside a smaller slab 0.3 × 0.08 m. The ends are built of rubble in one or two courses. Covered by three irregular slabs of respectively 0.62 × 0.42 × 0.09 m; 0.67 × 0.4 × 0.12 m; and 0.53 × 0.27 × 0.09 m, besides some rubble. Some of the latter lay also outside the north-eastern end of the cist. On the bottom of the cist a rather defective skeleton of a child — to judge from the burial gifts a girl — lying on its back in an extended position with the head to the S.W., the arms somewhat bent, the hands had evidently been lying over the abdomen. Near each ear a bronze earring.

Tomb Hell. 5. Square S 1; Ter. III. Irregularly oblong cist oriented N.E.—S.W., inside 2.0 m long, 0.45 m broad, and 0.35 m deep. The sides and south-western end built of slabs placed on edge, the largest 0.7 × 0.35 m, the slabs

<sup>1</sup> Of the loose, granular limestone which has often been used at Asine during the Roman Period.

and stones of the north-eastern end were missing. Covered with six irregular slabs or flakes, the largest 0.98 × 0.62 × 0.18 m. On the bottom of the cist a skeleton lying stretched out on its back with the head to the S.W., the arms bent and the hands folded over the abdomen. Just above the cranium were found two bronze coins.<sup>2</sup> Fig. 127.

Tomb Hell. 6. Ter. II. Cist, inside 0.75 m long, 0.3 m broad and 0.3 m deep. The sides built of small slabs, the ends of one large slab each, a cover-slab lay close to the cist. In the cist a very small child's skeleton. No burial gifts.

Tomb Hell. 7. Square T 5; Ter. III. Earth-cut grave. A skeleton in an extended position, on the back, with the head to the S.W., the right arm extended along the side, the left one somewhat bent, with the hand over the pudenda. Covered with some broken tiles. No burial gifts.

Tomb Hell. 8. Square T 1; Ter. III. On a tile oriented N.E.—S.W., 0.65 m long, at the top 0.23 m and at the bottom 0.17 m broad, lying almost horizontal, with the concave side upwards, a rather defective child's skeleton in an extended position on the back, with the head to the S.W.; the right hand on the abdomen, the other missing.

<sup>2</sup> As to the dating of this coin, and the coins in the tombs on Mt Barbouna, see Persson's forthcoming paper on the Asine coins.



No burial gifts. The skeleton was covered with a similar tile. No burial gifts. Fig. 128.

Tomb Hell. 9. Square S 4—5; Ter. III. Earth-cut grave. A skeleton lying stretched out on the back with the head to the W.S.W., the right arm extended along the side, the left one bent with the hand over the abdomen. Near the right side of the head a bronze pigment rod (see below). In the filling a flake of obsidian. The tomb was covered with three (?) now broken tiles, laid in its longitudinal direction, though somewhat to the left of the skeleton's centre line so that its right side was uncovered.

Tomb Hell. 10. Ter. II. Earth-cut grave. The skeleton of a probably mesocranial man,<sup>1</sup> lying stretched out on the back with the head to the W.S.W., the arms somewhat bent, with the hands over the pudenda. No burial gifts. The tomb was covered with three tiles laid in the longitudinal direction of the tomb, though to the left of the centre line of the skeleton, so that the right upper portion and the legs lay uncovered. One of the tiles was whole and measured 0.8 m in length, 0.38 (at the top) — 0.32 (at the bottom) in width, and 0.025—0.035 m in thickness. Figs. 125, 126.

Tomb Hell. 11. Ter. II. Earth-cut grave. The skeleton

<sup>1</sup> Fürst, l. c., No. 35 FA, p. 117 ff.

of an old dolichocranial woman,<sup>2</sup> lying stretched out on the back with the head to the W.S.W., the arms somewhat bent with the hands over and near the pudenda. No burial gifts. The skeleton was covered with two tiles 0.8 and 0.75 m long laid in the longitudinal direction of the tomb, though somewhat to the left of the centre line of the skeleton, and with the concave side downwards. Figs. 125, 126.

Tomb Hell. 12. Ter. II. Earth-cut grave. The skeleton of a young, dolichocranial woman,<sup>3</sup> lying extended on her back with the head to the S.W., the arms somewhat bent with the hands near the pudenda. Near the right shoulder a bronze pin (?); in the tomb were also found an animal bone, near the left temple, and a chip of obsidian. Near the outside of the chins had been placed some stones: Near the left leg one 0.22 m long, near the right one two, 0.3 and 0.15 m long. The upper part of the skeleton, the left half, covered by a 0.8 m long tile lying along its length with the concave side turned down; over its lower part and after another distance of 0.7 m, lay some fragments of similar tiles, partly placed lengthwise, partly crosswise. The tomb lay above Tomb M. H. 97.

<sup>2</sup> Fürst, l. c., No. 36 FA, p. 119.

<sup>3</sup> Fürst, l. c., No. 37 FA, p. 119 f.

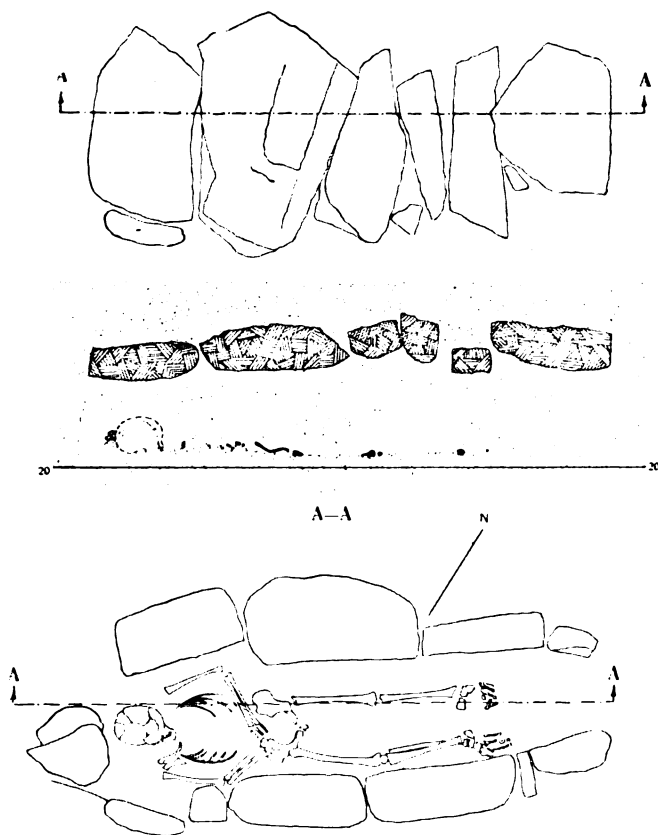


Fig. 127. Tomb Hell. 5.



Fig. 128. Tomb Hell. 8.

DIAGRAM SHOWING THE CHARACTERISTIC FEATURES OF THE TOMBS IN THE LOWER CITY: —

	T o m b					B u r i a l								
Tomb No.	Cist	Rock-cut	Earth-cut	Pithos	Orientation	Contracted	Out-stretched	Orient. of head	R.=right side; L.=left side	Dorsal	Male	Female	Child	Special remarks
MIDDLE HELLADIC TOMBS.														
M.H. 1						+		N.	L.					Stone enclosure.
2						+		N.	L.					Stone enclosure.
3						+		N.	L.					Stone enclosure.
4	+				N.W.-S.E.		+	S.E.		+				Bottom of shingle. Burial gifts.
5			+			+		N.						
6			+					N.E.						
7			+										+	
8			+			+	?	E.						
9			+			+	?	N.E.					+	
10				+									+	Charcoal particles.
11				+									+	
12				+									+	
13			+			+	?						+	Skel. orient. N.W.—S.E.
14			+	?									+	
15			+											Skel. orient. N.W.—S.E.?
16			+			+	?						+	Skel. orient. E.—W.
17				+									+	
18	+				N.E.-S.W.		+	E.N.E.	R.				+	Charcoal particles. Burial gifts.
19			+											Skeletal remains.
20	+	?	+	?		+		N.W.	L.			+		Brick enclosure? Bottom of shingle. Burial gift.
21			+			+		N.W.	R.		+			Burial gift.
22			+					N.?					+	
23			+			+		S.W.	L.		+			Burial gift.
24			+			+								
25			+											Skeletal remains.
26	+				N.E.-S.W.	+		S.W.	L.					Bottom of shingle.
27	+				N.E.-S.W.	+		S.W.	L.		+			Bottom of shingle.
28		+			N.N.W.- S.S.E.	+		S.S.E.	R.					Bottom of shingle.
29	+				N.E.-S.W.	+		N.E.	R.		+			
30	+				N.E.-S.W.	+		N.E.	R.			+		Bottom of shingle.
31			+			+		S.E.	L.		+			Bottom of shingle. Burial gift.
32	+				N.W.-S.E.			S.E.					+	Square cist. Burial gift.
33			+					E.N.E.					+	
34	+				N.E.-S.W.	+		S.W.	L.					Bottom of pebble. Burial gift.
35			+										+	
36			+										+	
37			+											Skeletal remains.
38			+			+		N.W.	R.					Burial gift.
39			+					S.E.					+	
40			+										+	
41			+										+	
42													+	Rubble- and brick enclosure.

		T o m b				B u r i a l								
Tomb No.	Cist	Rock-cut	Earth-cut	Pithos	Orientation	Contracted	Out-stretched	Orient. of head	R. = right side; L. = left side	Dorsal	Male	Female	Child	Special remarks
M.H. 43			+										+	
44			+										+	
45				+		+		W.	L.				+	
46			+										+	
47			+			+		N.	R.					Bottom of pebble.
48			+										+	
49			+			+		N.		+			+	
50			+										+	Bottom of pebble.
51			+			+							+	
52	+?		+?			+		S.W.		+	+			Double-tomb. Bottom of pebble. Burial gifts.
53				+	S.W.		+		+					
54		+			E.-W.									Bottom of shingle. Cenotaph?
55	+				N.W.-S.E.	+		N.W.	L.				+	
56			+			+		N.E.	R.				+	
57				+									+	
58	+		+			+		S.	L.?		+			Burial gift.
59	+				N.E.-S.W.	+		S.W.	L.			+	+	Bottom of shingle. Burial gift.
60	+				N.E.-S.W.		+	N.E.	L.			+	+	Bottom of clay. Burial gifts.
61	+				N.W.-S.E.	+		N.N.W.	R.			+		Bottom of shingle.
62	+				N.W.-S.E.	+		S.E.	L.		+			Bottom of shingle.
63			+			+		N.W.		+			+	Bottom of shingle. Burial gift.
64			+			+		N.N.W.	L.				+	Possibly a wooden coffin.
65			+			+		N.E.		+			+	Possibly a wooden coffin.
66			+			+		S.W.	L.				+	
67			+			+		S.W.					+	Possibly a wooden coffin.
68			+				+	N.N.E.		+			+	
69			+			+		S.W.	L.				+	
70			+			+		S.W.					+	
71			+										+	Covered by a slab.
72	+				W.N.W.		+	E.		+			+	
73	+				-E.S.E.								+	Skeletal remains.
74			+			+		S.S.W.	L.			+		Bottom of shingle. Burial gift.
75	+													Partly rock-cut.
76			+			+							+	
77			+										+	
78	+					+								
79			+										+	
80	+				N.N.E.	+		N.N.E.	R.			+		Burial gifts.
81			+		-S.S.W.							+		
82	+				N.W.-S.E.	+		S.E.	L.				+	
83	+					+								
84			+			+						+		
85			+										+	
86			+											Skeletal remains.
87			+										+	



Tomb No.	T o m b					B u r i a l								Special remarks
	Cist	Rock-cut	Earth-cut	Pithos	Orientation	Contracted	Out-stretched	Orient. of head	R. = right side; L. = left side	Dorsal	Male	Female	Child	
M.H. 88			+										+	
89			+										+	
90			+										+	With bones of an older individual.
91			+										+	
92			+			+	?						+	Bottom of shingle.
93			+										+	
94			+										+	
95			+										+	
96			+										+	Skeletal remains.
97	+				N.E.-S.W.	+		W.S.W.	L.		+			Burial gifts.
98					N.E.-S.W.	+		E.N.E.	R.			+		Stone enclosure. Burial gifts.
99	+				N.E.-S.W.	+		S.W.	L.		+			Bottom of shingle.
100		+			E.N.E. -W.S.W.	+		E.N.E.	R.		+			
101	+				N.N.E.- S.S.W.	+		N.N.E.	R.			+		
102			+			+		S.W.	L.				+	
103			+										+	Covered by a clay packing?
104	+				N.-S.	+		N.	R.					Bottom of shingle.
105			+										+	
106	+				N.-S.									Bottom of shingle. Skel. remains.
LATE HELLADIC TOMBS.														
L.H. 1			+										+	?
2			+					S.E.						
3			+			+	+	N.W.	R.				+	Covered by an L.H. sherd.
4			+										+	
5			+										+	
6			+										+	
7			+										+	
8			+										+	
9			+										+	
11	+				N.W.-S.E.	+		S.E.	L.				+	Burial gifts.
PROTO-GEOMETRIC TOMBS.														
P.G. 1	+				N.N.W.- S.S.E.	+		S.S.E.		+				Burial gift.
2	+				N.E.-S.W.	+		N.E.		+			+	
3	+				N.E.-S.W.	+				+		+		Burial gift.
4	+												+	Bottom of shingle. Charcoals.
5	+												+	Bottom of shingle. Charcoals.
6	+				E.N.E.- W.S.W.	+	?	E.N.E.	R.				+	Charcoal particles.
7	+												+	Charcoal particles.
8	+												+	

Tomb No.	T o m b					B u r i a l								Special remarks
	Cist	Rock-cut	Earth-cut	Pithos	Orientation	Contracted	Out-stretched	Orient. of head	R. = right side; L. = left side	Dorsal	Male	Female	Child	
P.G. 9	+												+	Burial gifts.
10	+				E.N.E.- W.S.W.		+	E.N.E.		+				Burial gifts.
11	+				N.N.W.- S.S.E.		+	S.S.E.		+				
12	+				N.W.-S.E.	+		S.E.	R.					Burial gifts.
13			+										+	Covered by pithos sherds.
14			+										+	
15			+				+	S.		+				
16	+													Skeleton destroyed.
17	+				W.N.W.- E.S.E.		+	E.S.E.		+	+			Burial gift.
18	+				N.W.-S.E.									Burial gifts. Charcoals.
19	+				N.E.-S.W.		+	N.E.		+			+	Skeletal remains.
20	+				N.E.-S.W.		+	N.E.		+				
21	+				E.N.E.- W.S.W.		+	E.N.E.		+			+	
22			+				+	E.		+				Covered by pithos sherds.
23	+				N.W.-S.E.	+		N.W.		+			+	Two tomb altars.
24	+				N.W.-S.E.		+	N.W.		+				Burial gift.
25	+				N.W.-S.E.		+	N.W.		+				Bottom of shingle. Burial gift.
26	+													Skel. remains. Burial gifts.
27	+													Skel. remains. Burial gifts.
28	+				E.N.E.- W.S.W.	+		E.N.E.	R.					
29	+				W.N.W. -E.S.E.									Cenotaph?
30	+				N.W.-S.E.									Skeletal remains.
31			+			+		S.E.	R.		+			
32	+													Skeletal remains.
33			+											Skeletal remains.
34	+				E.-W.		+	E.	R.				+	Charcoals. Bones of fish?
35	+				N.E.-S.W.		+	N.E.		+			+	Burial gifts.
36	+				N.E.-S.W.		+	N.N.E.		+			+	Burial gift.
37	+				N.W.-S.E.		+	S.E.		+			+	Burial gifts.
38	+				N.E.-S.W.		+	N.E.		+			+	Adolescent.
39	+				N.N.W.- S.S.E.		+	S.S.E.		+				Adolescent. Burial gift.
40	+				N.-S.		+	S.		+				Burial gifts.
41	+				E.N.E.- W.S.W.	+	?	E.					+	
42			+											Skeletal remains.
43	+				N.N.E.- S.S.W.		+	S.S.W.	L.					Burial gifts.
44	+				N.E.-S.W.		+	S.W.		+				Burial gifts.
45	+													Skeletal remains. Ash.
46			+											Skeleton.

		T o m b					B u r i a l								
Tomb No.		Cist	Rock-cut	Earth-cut	Pithos	Orientation	Contracted	Out-stretched	Orient. of head	R. = right side; L. = left side	Dorsal	Male	Female	Child	Special remarks
HELLENISTIC TOMBS.															
Hell.	4	+				N.E.-S.W.		+	S.W.		+			+	Burial gifts.
	5	+				N.E.-S.W.		+	S.W.		+				Burial gifts.
	6	+												+	
	7			+				+	S.W.		+				Covered by tiles.
	8			+		N.E.-S.W.		+	S.W.		+			+	Covered by a tile.
	9			+				+	W.S.W.		+				Covered by tiles.
	10			+				+	W.S.W.		+	+			Covered by tiles.
	11			+				+	W.S.W.		+		+		Covered by tiles.
	12	+	?	+	?			+	S.W.		+		+		Covered by tiles. Burial gift.

Excavated in 1922: Tombs M.H. 17 and 39; in 1924: Tombs M.H. 4—13 and 16, L.H. 1 and 2, P.G. 1; in 1930: Tombs M.H. 57, 104 and 106; in 1926: all the other tombs.

Of the tombs in the Lower Town the number of children's tombs is strikingly large in proportion to that of all the tombs: this holds good especially for the M.H. and L.H. tombs: 56 (or 57) out of the 106 M.H. tombs and 8 (or 9) out of the 10 L.H. tombs, are children's tombs. The majority of the tombs that have escaped the notice of the investigators have, of course, also been children's tombs. The number of children and infantile mortality have clearly been very considerable at Asine during these periods.

The children have as a rule been buried in a simpler manner than the adults; this also holds good particularly for the said periods. Only 5 out of the 25 (or 28) cist-tombs from the M.H. period are children's tombs, whereas 44 (or 45) out of the 61 (or 66) earth-cut graves contained skeletal remains of children. All the 6 pithos-tombs, on the other hand, are children's tombs; this burial custom does not seem to have been employed for the adults. 7 (or 8) out of the 9 earth-cut L.H. tombs are children's tombs. The only L.H. cist-tomb of the Lower Town is also a child's tomb. The adults seem as a rule to have been taken to the chamber-tomb necropolises on Mt Barbouna (cf. p. 355 ff.).

The burial cult has been very varying. However, some lines can be more clearly distinguished.

46 (or 54) of the M.H. tombs have — in so far as the position of the skeleton could lay down more particularly — contained one skeleton in a contracted position, but on the other hand only 5 skeletons in an extended position. The direction of the head varies greatly: in the majority of cases it points to the N. (7 or 8), N.E. (7), S.E. (6), S.W. (13) and N.W. (5) (cf. p. 342). Practically only lying on the side occurs. It should here be noted that of the skeletons lying on the right side 10 have the head turned to the N.W.—N.—N.E., and only one in the opposite direction (S.S.E.), whereas of the skeletons lying on the left side 13 (or 14) are placed with the head to the S.W.—S.—S.E., and only 7 in the opposite direction. This means very likely that the corpse had been purposely placed in such a position that the face was turned to the west, towards the setting sun (cf. p.

343). Finally it might be mentioned that the skeleton is often lying on a bed of shingle or small pebbles. This circumstance has been noted in 21 cases, both in cist, rock-cut, and earth-cut graves.

The L.H. tombs are too few in number to permit any very valid conclusions to be drawn. It should, nevertheless, be noted that burial in cist still occurs, but that the earth-cut graves predominate. Contracted position occurs still alongside extended position. In two cases in which the position of the skeleton could be more thoroughly studied, the face was also turned to the west.

During the P.G. period burial in cists predominates, now cists of a man's length in contradistinction to the short cists of the M.H. tombs — though earth-cut graves still occur (8:38). In the cist-tombs the skeleton is mostly placed in an extended position, on the back in 20 cases observed, on the right side only in one case, on the left side likewise only in one case. Contracted position occurs in 4 (or 6) cases, one of them lying on the back, 3 (or 4) lying on the right side. In the earth-cut graves the skeletons have in two cases been found to lie stretched out on the back, in one case in a contracted position and on the right side. Finally, it should be noted that also during this period, though rarely, the corpse had been placed on a bed of shingle.

Only 3 (or 4) tombs out of those from Hellenistic time are cist-tombs, the remainder earth-cut graves, with a cover of large tiles specially characteristic of these tombs. In 8 cases the position of the skeleton could be determined: all of them lying out-stretched on their back, with the head directed to the S.W. or W.S.W. The corpse had in this case the glance directed to the east, the Cristian custom. A great deal thus really speaks in favour of some tomb or other being Christian.<sup>1</sup>

<sup>1</sup> The above diagram, and the short summary on the same refer entirely to the previous descriptions of the tombs. As is seen, the figures given here, do not in all instances tally with those quoted in the ensuing chapters on the tombs. In those cases where any differences occur these can be accounted for by the fact that Prof. Persson has grouped the material in a somewhat different way. (The Editor).



## C. The Barbouna Area

During the 1922 spring campaign preliminary investigations were carried out in the Barbouna area, and some diggings were made in the Geometric necropolis there (p. 192). A Hellenistic tomb was excavated (p. 197).

During the autumn campaign of the same year the work on the Geometric necropolis was continued. In the Mycenaean necropolis I the greater part of Chamber-tomb I was excavated (p. 154) besides which trials were made in the burial ground.

The investigation of this chamber-tomb, as well as the trials in the necropolis, were concluded during the 1924 campaign. The chamber-tombs 2—6 were excavated (p. 162); but only a small part of Tomb 4. Further, a couple of Hellenistic tombs in the same necropolis were examined (p. 194). The investigations were begun on the top terrace (p. 148).

The work on the top terrace was continued during the 1926 campaign (p. 148). The excavation of Chamber-tomb 4 in the Mycenaean necropolis I was concluded and Chamber-tomb 7 was dug (p. 182). An investigation was also made of the Mycenaean necropolis II (p. 189).

Only minor, supplementary investigations were carried out during the 1930 campaign on the Barbouna area.

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\*

## I. WALLS AND TERRACES

The most conspicuous among the structures visible above ground on Mt Barbouna is the wall (fig. 129) lying some distance up the hill on the northern and north-western slope of the mountain; it can be followed for some 500 m from the small, projecting point to the N., running along first in a S.W. and then in a S.E. direction to the point on the W. side where the precipitous slopes S.W. of the top plateau begin. Immediately below this plateau, to the S.E. the remains of a similar wall, built of huge blocks of stone, can be seen for a short distance.

Of the former wall only the foundations actually remain built of large and small rough stones, to a height of one or two courses, but the width, 2 m, indicates that there was once quite a stout wall, surrounding the upper part of the mountain on these sides. To the N.W. can be seen the remains of an entrance 2 m wide with traces of a gate tower of a rectangular ground-plan, 3×6 m.

Just about here begins another wall, which has rather the character of a terrace-wall; running into a gentle gradient first in an easterly, and then in a south-easterly



Fig. 129. Wall on the north side of Mt Barbouna.

direction, it follows the northern, gently sloping side of the mountain for some distance up towards the top. On the terrace supported by the wall potsherds were found, mainly Geometric. During the 1924 campaign two sections were cut through the terrace and the wall without any remarkable result. The deposit was here found to be very thin.

80 m W. of the gate tower already mentioned, and 20 m lower down, another wall can be traced for about 100 m in a N.—S. direction. This, too, has almost the character of a terrace-wall.

## 2. THE TOP TERRACE

Immediately W. and N.W. of the highest point of the mountain (91.51 m) stretches a plateau, or rather a partly artificial terrace,  $40 \times 40$  m, enclosed to the S.W. and S.E. by rocks, to the S. by a buttress 20 m long constructed of large undressed stones and to the W.—N.—E. by a similar curved buttress, 75 m. long.

Roughly in the centre of this terrace, the surface of which was plentifully strewn

with potsherds, lay a cairn-like accumulation of stones, which, towards the end of the 1924 campaign, became the subject of closer investigation. In the course of this, the foundations of a building began to come to light. This was cleared for the most part and was found to have a rectangular ground-plan, oriented N.—S. Two other trenches were dug across the terrace, one in an eastern direction and touching the southern shortside, the other at right angles to the former through the building and along the long axis of the latter.

This last trench was dug across the two buttresses of the terrace, which was then found to have had an entrance 1.5 m wide at that point. The walls here had an average thickness of 2.3 m.

At the western end of the east-west trench was found a great accumulation of sherds (fragments of, mostly very large, Geometric vases), which continued for some 20 cm in its northern wall. In the western part, and the southern edge, moreover were laid bare the remains of a rectangular enclosure, probably a cist (from Byzantine times?); no traces of skeleton could, however, be discovered. Further towards the E., opposite the end of the building, was found a vast quantity of sherds (Geometric, Proto-Corinthian, Corinthian), a couple of idols of Archaic type, a badly preserved bronze ring, an iron knife-blade, some other iron fragments, etc. (see below).

During the clearance of the inside of the building some more objects were brought to light: Apart from sherds (Geometric, Proto-Corinthian) and charcoal, Archaic and Hellenistic roof-tiles, pieces of an Archaic sima of terracotta, a triangular bronze arrow-head, a bronze pin, as well as, in the uppermost layer of soil in the south-western corner, a small Archaic lead statuette of Apollo (fig. 225: 1).

The finds appeared to date the building to the Archaic period, probably to the 7th century. Various considerations seemed to support the idea that the temple consecrated to Apollo Pythaios, of which Pausanias speaks (p. 16), once stood here on the uppermost terrace of Mt Barbouna, the highest point of the Asine area. It was hoped that a future, more thorough, investigation would supply more definite evidence.

This investigation was undertaken during the 1926 campaign when some further trenches were dug across the terrace (fig. 130). To the west of the rectangular foundation then came to light first a piece of wall 6 m long and 0.5 to 0.6 m wide, and broken away in places, running E.—W., and secondly, to the north of this, an apsidal wall 7 m long and 0.5 broad, with its convex side facing W. No continuation of this wall nor any connection between the two could be traced. Geometric potsherds were found, though in small quantity.

The rectangular foundation were completely cleared and the interior was investigated further. Its outside measurements are 4.3×9.6 m, with a height of 0.6 m. In the middle of the southern end wall is a door 1.2 m wide, with a threshold of about 10 ashlar blocks (not bonded with the wall). The walls are constructed of unhewn stones some as large as 1 m with a flat outer surfaces built as outer and inner shell



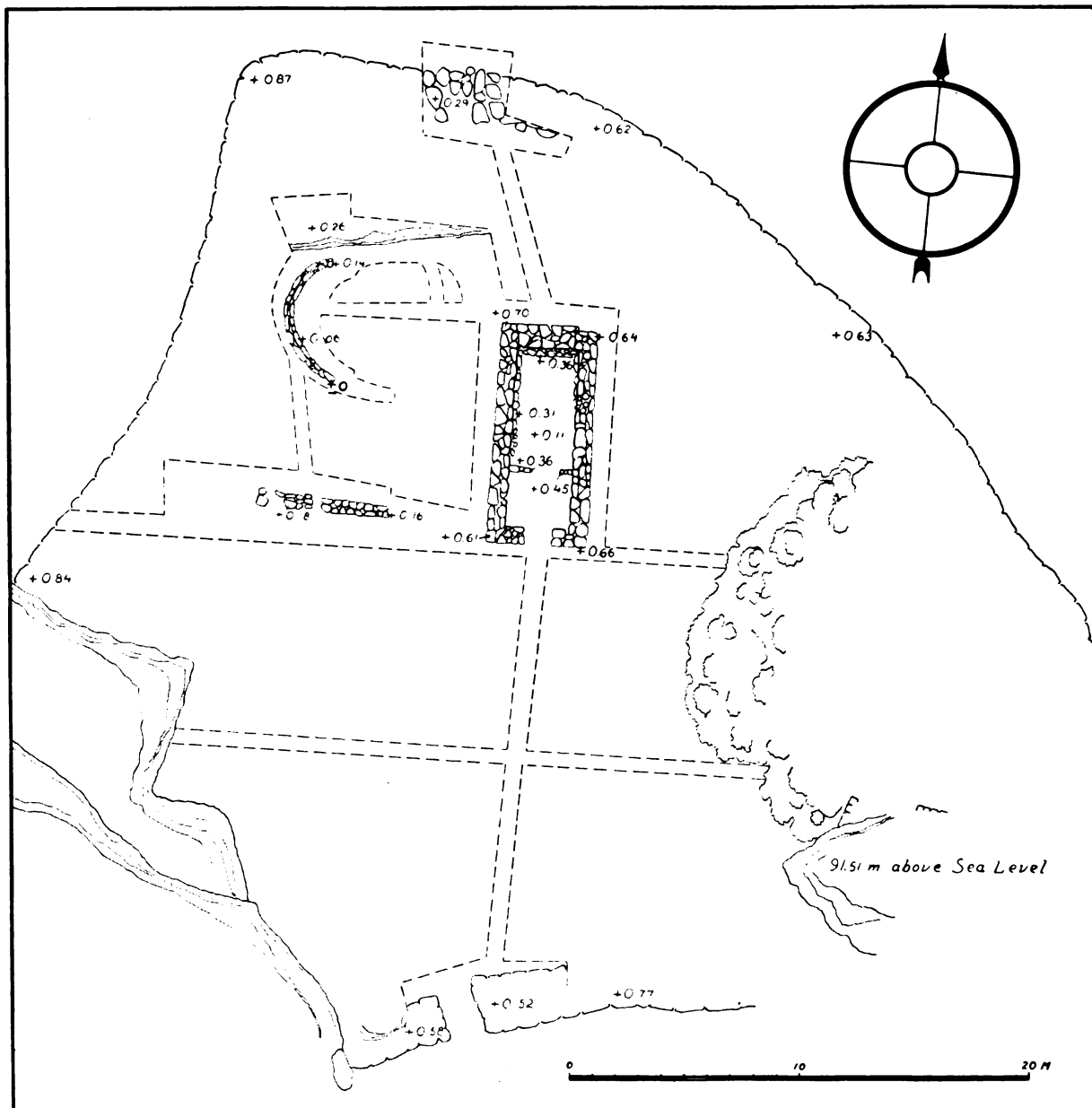


Fig. 130. Architectural remains on the top terrace of Mt Barbouna.

wall, with a core of rubble, the corners being bonded. The thickness of the wall is 0.8 m, at the north end 1 m. The interior is divided into two rooms or chambers, separated by a partition wall 0.2 to 0.3 m thick, only 1 stone high. Slightly east of the middle is a doorway, 1.2 m wide. This cross wall is 0.25 m lower than the outer walls, and is not bonded with them. The southern, outer, room measures  $2.4 \times 2.7$  m, the inner, northern one  $5.2 \times 2.7$  m. Along the walls of the inner room, to the N.,

W., and E., runs, 0.3 m below the present wall-coping, a bench-like ledge, now incomplete, 0.3 m wide, made of flat stones. Whether there was such another in the outer room is uncertain. Traces of paving stones can also be seen in both rooms.

At a somewhat higher level were found within the foundation a large quantity of tile fragments; on about a level with the ledge or bench were some Corinthian sherds and on a slightly lower level some Mycenaean ones. At the same level as the former sherds, in the inside room, a bronze coin was also found. Finally, there came to light, first a few Proto-Corinthian and Geometric potsherds outside the east wall, and secondly, immediately outside the northern end wall, an accumulation of sima fragments and bits of roofing-tiles. Fragments of tiles (including profiled ones) were also found close to the door.

The final question as to the results of the excavations of the top terrace was that a temple had actually stood here, probably the one mentioned by Pausanias.

### 3. MYCENAEAN NECROPOLIS I

During the spring of 1922, when work was going on in the acropolis and in the Lower Town and the Barbouna had not yet been included, a cave-like formation was noticed on one of its slopes, which seemed, though not conclusively, to owe its existence to the hand of man. Closer investigation had however to be kept in abeyance until the autumn of the same year, when trial-holes for examining the deposit in the bottom or floor of the cave were made. During this operation Mycenaean potsherds and also parts of a human skeleton were brought to light, and it was now seen that the cave was in reality a Mycenaean chamber-tomb, whose roof had partly fallen in. A full excavation was started here without delay (see below, Tomb 1).

As it could be assumed that several tombs of the same kind might be found in the neighbourhood, the surrounding ground became the subject of a closer examination, which was concluded during the 1924 campaign. Along the even slope of the hill, which is covered with only a thin layer of soil, at short intervals from each other a large number of long, horizontal trenches were dug, which were thus bound to intersect the tomb entrances cut into the rock, if any existed.<sup>1</sup> These investigations resulted in the discovery of 25 more tombs. Of these, six have been examined (see below, Tombs 2—7). The three Hellenistic tombs were also discovered, which are dealt with in detail on p. 194 ff.

The necropolis lies N.E. of the peak of the hill, on the lower part of its eastern slope (figs. 131—133). It occupies an area which is at the most 35 m wide, the lower boundary being about 10 m above the foot of the hill, and thence extending 120 m in a N.W. direction, stretching obliquely up the slope to a height of 40 m above

<sup>1</sup> The same L.H. and Geometric sherds were found and though less numerous also sherds of the Hellenistic and Roman periods.

the first level. The bedrock consists of easily worked, soft, granular and stratified, occasionally conglomerated, limestone, alternating with soft shales; beyond commences very hard, grey limestone, of which the bedrock of the district mostly consists. In the N.W. the tomb area proper is enclosed only by a small ridge of this hard rock; on the other side the softer rock again occurs, and here lies another tomb, rather isolated from the others.<sup>1</sup>

About 5 m below the lowest part of the necropolis a low stone wall about 45 m in length was noticed on the slope, running N.N.W.—S.S.E., and parallel to the foot

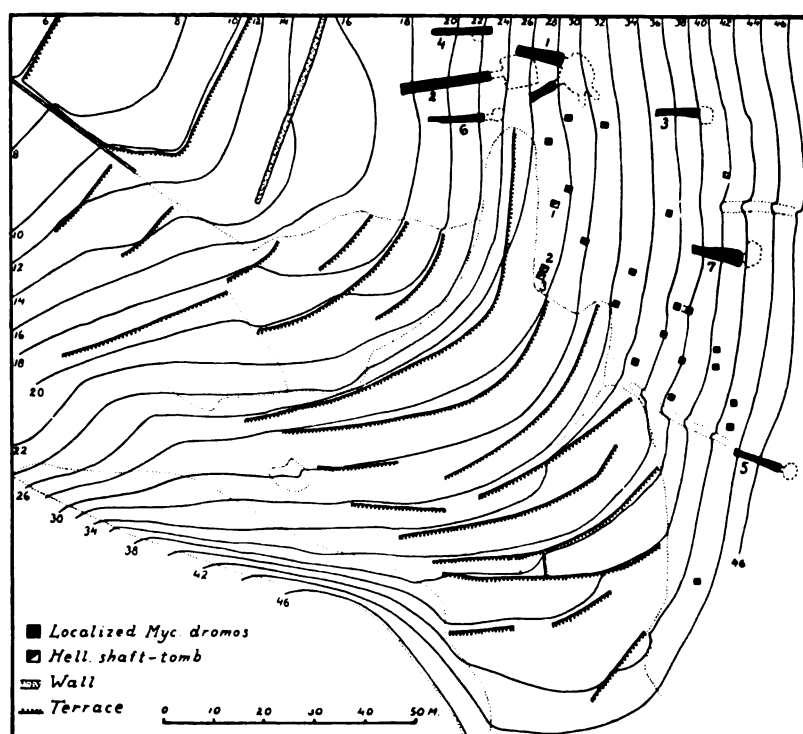


Fig. 131. Contour map of the Mycenaean Necropolis I. Cf. fig. 1.

of the hill, possibly the remains of the foundation of a protective wall or terrace-wall, which marked the border of the tomb area in this direction. When this was cleared Geometric, Hellenistic, and Roman potsherds came to light.

Near the northern end of this wall, and close to the eastward projection of the hill were found some vases of Geometric date, surrounded by stones, possibly a tomb.

Immediately N. of the necropolis the slope of the hill makes a turn to the N.E. and then follows the south side of the eastward projection already mentioned (fig. 1). The inside of this semicircular slope reminds one strongly of an ancient theatre, partly concealed by loose layers of soil, washed down, from above and this impress-

<sup>1</sup> The outer part of its chamber seems to have caved in. — It is possible that more tombs may be found in that direction, and likewise that one or more in the more concentrated tomb area may have escaped our notice.





Fig. 132. The Mycenaean Necropolis I from the north.

ion is heightened by the cultivated terraces that have been constructed. In the course of the trials made here during the spring of 1924, which were carried right down to bedrock, only a female terracotta head of Hellenistic date was found, as well as Geometric, Hellenistic, and Roman sherds.

About 100 m south-east, below the necropolis, and down near the very foot of the mountain, can be seen a cave in the rock (fig. 1). When it was first discovered, in the autumn of 1922, it was partly filled with soil and debris but later it was cleared out. It then became obvious that it was, at least partly, the work of human hands, cut out in the rock, which consists here of the same soft rocks as in the necropolis area. It measures 4.5 m in length, with its axis N.E.—S.W., and the opening to the N.E. The width of the inner part is 1.2 m; in the outer part there is a bench-like ledge in the wall on either side, and above these »benches» the breadth reaches 2 m. The height of the cave at the opening is 1.4 m, in the centre 1.7 m, and right inside part 1.1 m. The bottom slopes inward in four steps, so that the one farthest in lies about 1 m lower than that at the entrance. The filling consisted at the top of a layer of field-stones thrown in during later times, and earth; below that came grey limestone gravel with debris mixed up in it. In this there were also cleaner and more coherent layers of limestone gravel; such a layer, of fairly firm consistency,

stretched across the greater part of the bottom stratum, which consisted the same grey gravel. This filling has in all probability accumulated in the cave in the ordinary way, i. e. by the action of rain-water from the slope of the hill above it, and the firmer limestone gravel stratum developed afterwards by the precipitation of lime. In the filling below the surface layer L.H. sherds occurred sparsely; no bones, charcoal or ashes were noticed. The purpose of the cave is not clear (a plundered place of cult?), and its age is indefinable.

Mention should also be made of the quarry which was met with and cleared during the excavation of the necropolis, between Tombs 1, 2, and 4. Here, stone has been quarried from the soft rock, but chiefly from the surface stratum. This obviously took place in ancient times, but at an uncertain period. Of course, quite a number of Geometric and L.H. sherds were found in the soil, which now covers the slope of the hill in this place, but as this layer of soil has been for the most part washed down by rain-water from higher parts of the slope, no conclusions regarding the age of the quarry can be drawn from this fact. But there is much to be said in favour of the assumption that the blocks of soft, granular limestone of which some of the Roman walls in the Lower Town and at the entrance into the acropolis were built (see also p. 29), had been taken from here. For the rock is the same, and no other ancient quarry has been observed at Asine.

The Mycenaean tombs in this necropolis are, to judge by the results of the investigations made so far, typical chamber-tombs, cut out of the rock. A passage (dromos) long or short — now filled up — whose sides converge upwards without however meeting — it is thus open at the top along its entire length — leads through a rather narrow entrance (stomion), which often takes the actual form of a door, and is generally closed by means of stone-packing, into the tomb-chamber itself. The latter is vaulted, sometimes gabled, square or somewhat round in shape, and varies in size; occasionally, like the entrance, it has one, sometimes two, lateral niches, and also grave pits cut in the floor may occur.

#### CHAMBER - TOMB 1

The tomb lies close to the border of the necropolis, towards the S.E. (fig. 131). As has been already mentioned, excavation here was begun during the autumn of 1922, and the greater part of it was investigated with the co-operation of H.R.H. the Crown Prince himself. At the end of the campaign, there remained only a portion close to the N.E. wall of the chamber, where a stone wall had been built which might conceal a niche or the doorway if an abortive dromos. At the beginning of the 1924 campaign investigations here were resumed, and it was then found that behind the stone wall lay another dromos which was now dug out.

This dromos measures 8 m in length and runs N.N.E.—S.S.W. (the opening





Fig. 133. The Mycenaean Necropolis I from the east.

facing N.N.E.). The width at the entrance is 1.7 m, and inside, close to the door, 1.8 m; the height there is 3.5 m, reckoned from the rock surface. The sides are slightly concave. The floor slopes gently and regularly inwards, so that at the door it is 0.5 m lower than at the entrance.

The doorway, which has a depth of 1.6 m, is 1.4 m wide at the bottom; as usual, it tapers towards the top, but neither its upper width nor its height can be stated, since the lintel was completely destroyed right up to the surface of the rock. It was closed by rubble packing, which completely filled its lower portion, but grew gradually thinner towards the top, so that finally, at a height of 1.5 m above the floor, it was only one or two stones thick (fig. 134); its inside was, however, almost perpendicular.

The dromos south of this one, which is oriented E.N.E.—W.S.W. (the entrance being to the E.N.E.) measures 9.7 m in length. The width near mouth is 1.95 and inside, near the door, 2.7 m. The height there is 3.9 m, reckoned from the rock surface. The sides are pronouncedly concave. The floor is horizontal for the greater part of its length; only at its outer end, near the mouth, it slopes slightly inwards (0.2 m) for a distance of 2 m.



The depth of the door is, on the south side 0.8 m, on the north only 0.35 m, owing to the oblique setting of the dromos and door to the chamber. The height of the door at its outer end is 2.2 m; inside, towards the chamber, it rises to 2.4 m. The outer width at the bottom is 1.4 m, widening inside to 1.5 m.; the upper width was very likely 1 m. The lintel had almost totally gone, likewise a large piece of the upper, northern part of the door. The lower part of the door was completely filled

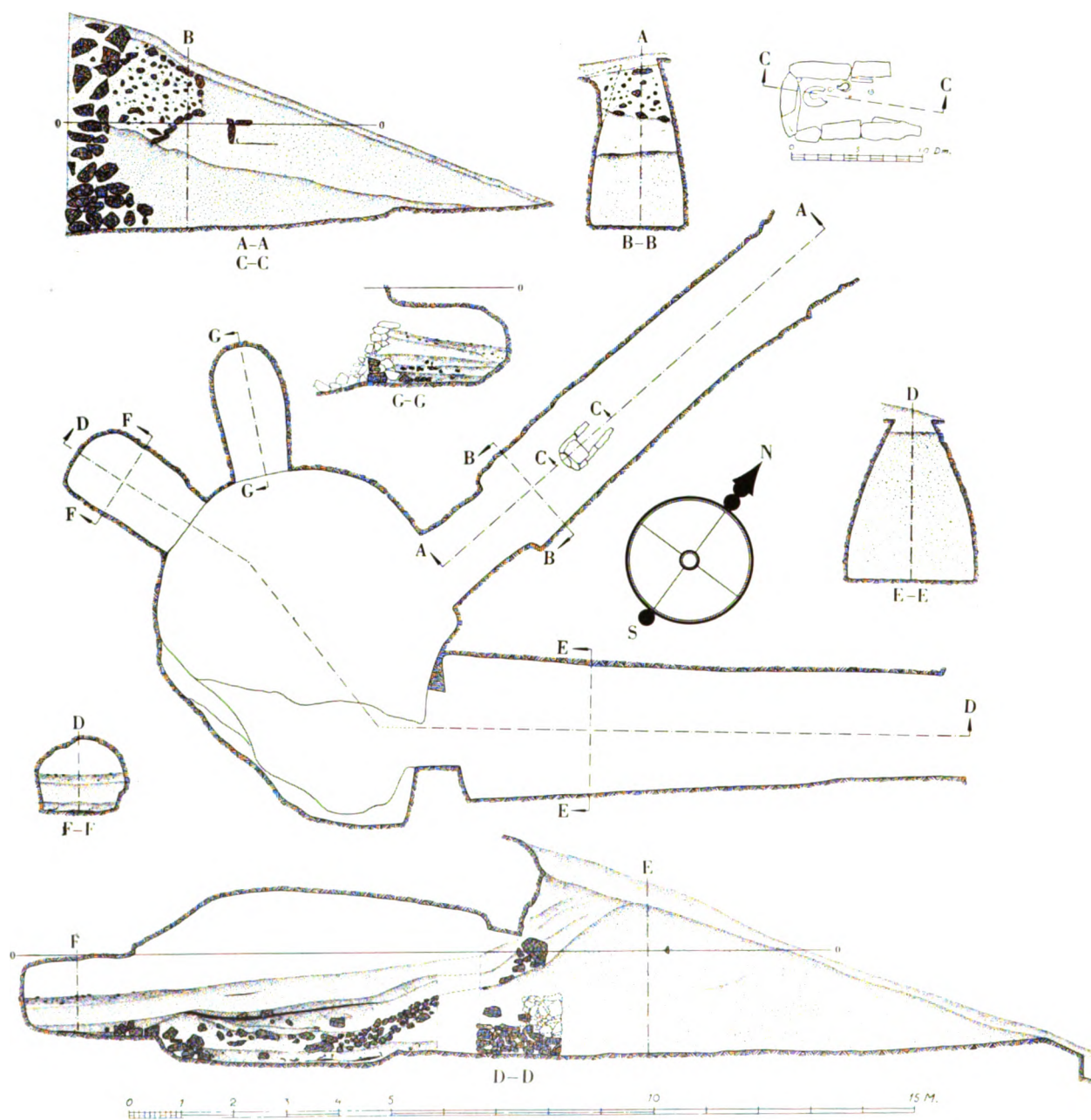


Fig. 134. Plans and sections of Chamber-tomb 1.

with rubble packing. Here — as was later on shown to be the case in Tombs 3, 5, and 6 — this rubble packing continued some distance out into the dromos, 0.65 m to the S., 0.9 m to the N., thus counteracting the oblique shape of the door, so that the outer face towards the dromos became almost straight. The rubble packing had originally been much higher and certainly filled the entire doorway; its upper part had collapsed into the chamber.



Fig. 135. Chamber-tomb 1; finds *in situ*.

. As to shape, the chamber is irregularly rounded, with its long axis N.W.—S.E.; the dimensions are  $7.2 \times 5.4$  m, with a height of 3.3 m to the ceiling. The floor is almost horizontal; one piece to the S. and S.E. is 0.25 m higher than the main part. The northern part of the ceiling had caved in and it was in connection with this that the extensive damage was done inside and near the southern door.

In the N.W. wall of the chamber two niches are cut, both 2.5 m deep and 1.5 m high, and widening slightly from the opening inwards, where the south-western measures 1.7 m in width, the north-eastern 1.3 m. The floor in the south-western is 0.4 m above the floor of the chamber, in the north-eastern one 0.2 m. The mouths of both had been closed with rubble packing, 0.6 m deep in the south-western, 0.4 m in the north-eastern; their upper portions have now collapsed, but the north-eastern remained standing to a height of 1.2 m.

In the filling of the northern dromos, below a 0.2 m thick surface layer of soil, appeared a rather loose packing of sand and gravel mixed with humus, which reached a thickness of 1.5 m at its inner edge. Farther in and obliquely above the door it changed, with a sharp delimitation, into a layer in which much rubble was mixed (fig. 134); the stones were however, much smaller than those of the door-packing. The lower part of the dromos, finally, was filled with a tightly packed mixture of sand and gravel, with a slight admixture of soil, its inner part being 1.6 m thick.

In the filling were found — apart from sporadic potsherds from later periods, obviously adventitious — some L.H. sherds, a bronze arrow-head, some amber beads, and a number of bone or ivory fragments (p. 376).

In the upper, looser filling, however, was found a cist grave at a height of 1.5 m above the bottom of the dromos and about as far from its inner end (fig. 134). It was rectangular in shape, oriented in approximately the same way as the long axis of the dromos (N.N.E.—S.S.W.), though with a further slight inclination N.—S., and built of ashlar blocks (0.3–0.4 m high and 0.12 to 0.15 m thick) placed on edge, one at the southern end 0.50 m long, three in the eastern long side, 0.23, 0.28 and 0.50 m long respectively, and two in the western one, respectively 0.45 and 0.30 m long; the third stone from there is now missing, and likewise the northern end-slab. This part of the cist had clearly been destroyed at some time, and consequently its present length of 1 m (inside) is probably not the original one; the inside width was 0.35 m and the depth 0.30 m. Its southern part was covered by a slab 0.35 m long; the crack between this and the southern end-slab was partly tightened with a narrow stone, resting on the end-slab and 0.30 m long. At the bottom of the cist, which consisted only of the filling of the dromos, were found skeletal remains, including a much damaged cranium, at the S. end and, also, an L.H. vase, a bronze ring and a stone button.

In the southern dromos the filling consisted — below the 0.2 to 0.4 m thick surface layer of humus — of grey limestone gravel mixed with small rubble, without



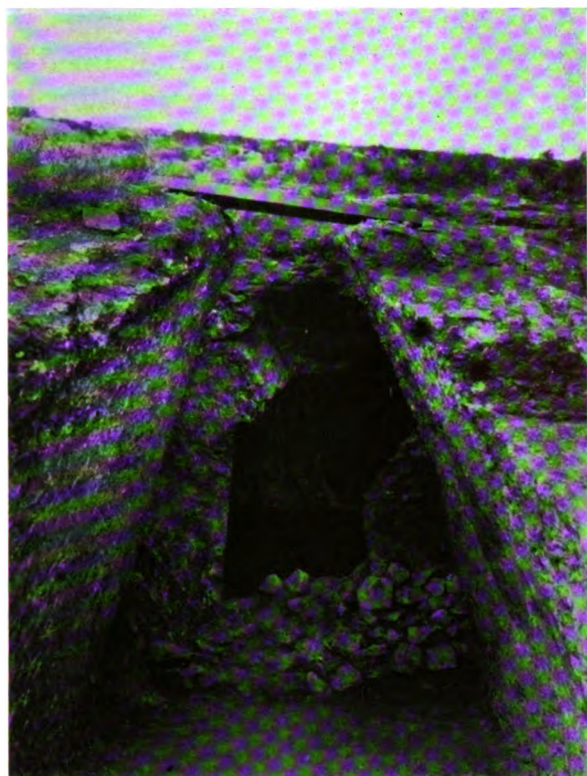


Fig. 136. Chamber-tomb 1; the southern dromos.



Fig. 137. Chamber-tomb 1; the southern dromos seen from the chamber.

any noticeable stratification. Here and there, in the inner half, L.H. potsherds occurred at various depths in this filling; and at the inner end, near the door, at a height of 1.4 m above the bottom of the dromos, was found the upper part of a skeleton, which, it was clear, had originally been laid out right across the door with the head to the S.; when the roof fell in however its lower extremities were dragged into the door-opening itself, where traces of them could be seen.

The collapsed portions of the roof and southern door-opening were found at the very bottom of the layer of soil, gravel, and rubble, which after the roof had caved in, had been washed down by the rain through the opening, or collected in some other way. The layer was as much as 1.5 m thick in the middle of the chamber and was partly stratified. In it occurred, at different levels, two layers containing charcoal and ash, one of considerable extent, animal bones, etc., showing that the cave was frequented at various periods by human beings, probably by shepherds. In the same way even the lateral niches were partly filled by a partly stratified layer of gravel and rubble, 0.5 (the south-western) to 0.7 m (the north-eastern) thick.

The grave-layer proper which covered the floor of the chamber and its niches, to a thickness of 0.2 to 0.3 m (fig. 134), contained — besides a multitude of different kinds

of objects (see below) the remains of at least 6 or 7 skeletons. Most of these bones were in a more or less fragmentary condition and were lying about in the greatest disorder. Only in two places a fairly intact skeleton was found. One of them was brought to light immediately S. of, and inside, the southern doorway, close to the wall of the chamber, lying extended on its back, with the head to the E., the left arm stretched straight out towards the pudenda (the hand proper was missing), right arm somewhat bent with the hand placed at the hip; it lay on the very top of the tomb-layer, upon the disturbed and fragmentary remains of another skeleton. Beside it lay a cut semi-precious stone. The other skeleton found approximately in the centre of the chamber, also lay on the top of the tomb-layer, but was, unfortunately, very defective and had been moved out of its position;<sup>1</sup> only the spine, the right forearm and the right leg were in situ. It had lain in an extended position with the head towards the S.E., and the right arm stretched straight along the side. It rested on a bed of rubble and stone chips and clay, placed upon the blackish-grey bottom layer. Even the vases found grouped around the skeleton (see below) go to show that it belongs to a very late period of the tomb's history and, more especially, to the transition to the Geometric period; in reality this skeleton, together with that of the »door-keeper» found in front of and in the actual door-opening, represents the last period at which burials were made in this chamber-tomb.

The burial layer was also stratified and contained accumulations of soot, ashes, and charcoal, especially pronounced at the lower level and increasing in thickness towards the southern doorway. Many of the bones there found also appeared to have been more or less scorched by fires kindled from time to time during the period in which the tomb had been occupied.<sup>2</sup>

The two dromoi place this chamber-tomb, to a certain degree, in a special class. Clearly, they are of different ages. Of course, the northern dromos certainly with its N.N.E.—S.S.W. orientation, is not cut at right angles into the rock, as is the case with the dromoi of the nearby chamber-tombs, but rather obliquely to the direction of its slope, which is N.E.—S.W., but it occupies quite a symmetrical position in relation to the chamber. Obviously this dromos is the older one. Moreover it was used during the greater part of the period during which burials occurred in the chamber, right into a late L.H. period, as the L.H.III sherds found in the filling indicate. The door had, however, clearly been found to be too unsafe, whereupon the first dromos was filled in and the southern dromos opened up, an arrangement which had already been made during L.H. times, as the L.H. cist found in the dromos filling clearly shows. On the other hand, as has been pointed out, the chamber was

<sup>1</sup> Whether this took place when the roof fell in, or earlier, e. g. by human agency and violence, is impossible to decide. That the burial-layer was accessible at a relatively late date, is proved by the fact that human bones, obviously from the burial-layer, have been found in the south-western part of the chamber, together with animal bones and a glazed sherd in a brown stratum containing much clay, which extended down to a level 0.3 to 0.4 m above the floor.

<sup>2</sup> Similar traces of burning occur also in the chamber-tombs 2 and 7 (see below).

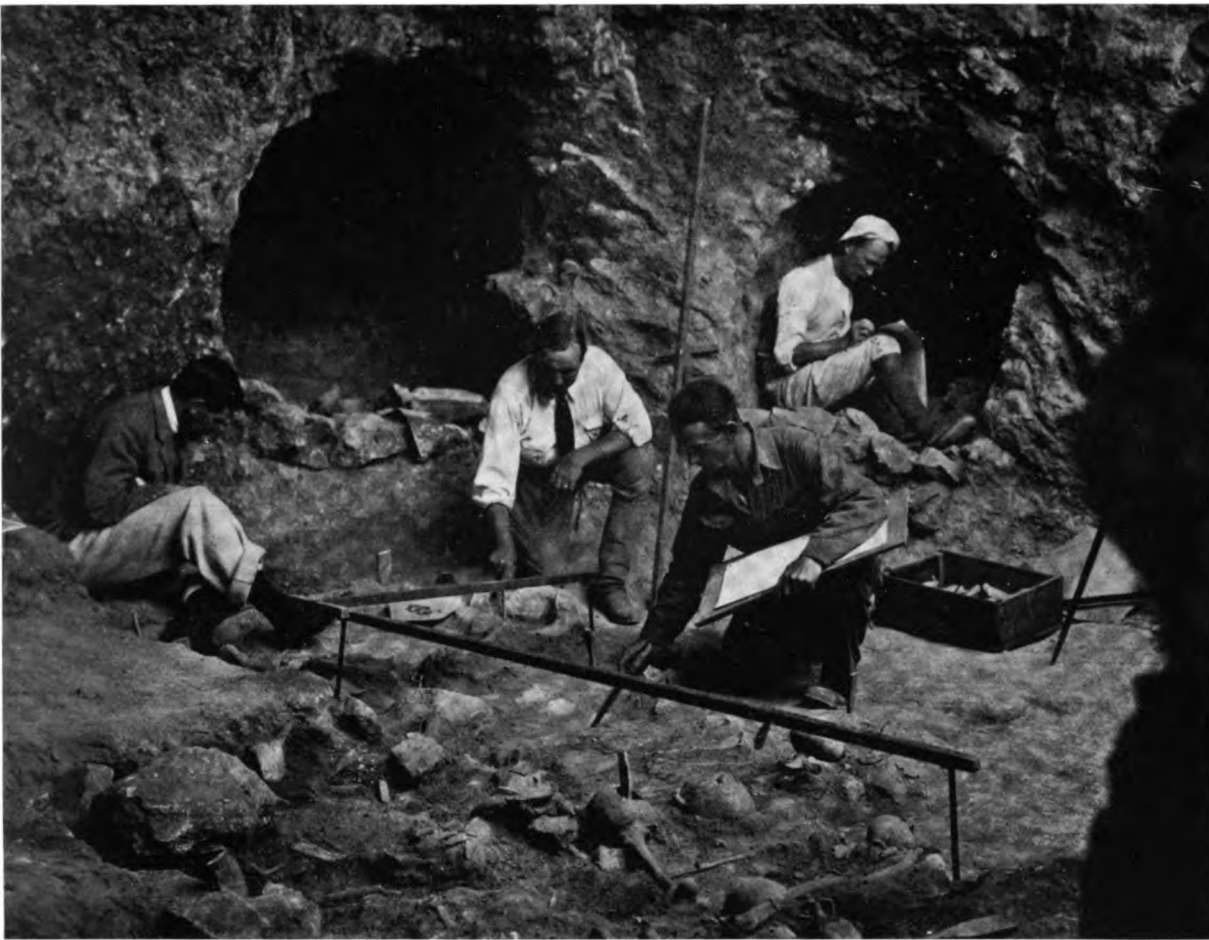


Fig. 138. Chamber-tomb 1 is excavated.

still in use during the period of transition to Geometric times. This condition of affairs shows clearly that the southern dromos is the younger. But this could not be cut at right angles to the slope either — in that case they would have come too close to the old dromos and the rock partition wall would have been too thin — and consequently they had to cut obliquely in towards the W.S.W., in order to reach the chamber. In this connection the chamber seems to have been slightly widened and enlarged at the S.E. side, to the left and inside the door, where the floor-level, as previously stated, is somewhat higher than the main part of the chamber.

The two side-niches contained comparatively few bones; in each niche a number approximately corresponding to the skeleton — disturbed on some later occasion — of a full-grown person. They thus seem rather to have been intended as separate tombs for one corpse than as a collecting place for the older skeletal remains from the main chamber, which had to make room for the later burials. The age of the niches in relation to the two dromoi, is difficult to determine.



## TOMB 2

This tomb, the largest of the chamber-tombs so far examined at Asine, is situated immediately below Chamber-tomb 1 (fig. 131). It was investigated during the 1924 campaign.

The dromos, which is oriented N.E.—S.W. (with the opening in the N.E.), measures 17 m in length. The width at the entrance is 1.9 m and inside, near the door, 1.7 m; the height, reckoned from the rock surface, is 5.9 m at that point. The sides are straight or very faintly curving. The floor rises regularly, but very gently (0.35 m), from the door and out towards the entrance for a length of 14 m, the remaining part again sloping very gently (0.1 m).

The corridor-like door has a depth of 2.9 m and a height of 2.6 m; the breadth near the floor is 1.2 to 1.25 m, and tapers, as usual, upwards; the width there is 1 m. At the top — both outside in the dromos and inside in the chamber — there are some fallen pieces of rock, and a metre-long piece of the upper, left-hand jamb was found fallen down inside the door; this is nevertheless in a very good state of preservation. On the surfaces of the walls here and also inside the chamber, still remain traces of stucco and distinct marks of the points of pick-axes.

The door was closed at the bottom by rubble packing of large and small stones, but this was not of uniform construction (fig. 139). Its lower levels completely filled the lower part of the stomion, nearest the dromos to a height of 1.5 m; on the inner side, towards the chamber, the height decreased (to 0.7 m) and the filling clearly had been partly demolished; inside the door, and for some distance within the chamber, lay a good many stones that had come from here. On this stone packing — below which could be observed the same densely packed floor layer of limestone gravel (here, however, 0.02 m thick) as in the dromos and chamber, was superimposed a layer of brownish-grey sand mixed with gravel, belonging to the dromos filling; in the outer half of the stomion this layer was 0.15 to 0.2 m thick, towards the inside gradually increasing in thickness — in spite of its sloping surface, and spreading delta-wise same way inside the chamber, where it partly covered the rubble debris fallen from the door-packing. From this sandy layer sand had also penetrated down between the stones in the upper part of the rubble packing, although lower down it was free from any admixture of sand. On this layer of sand lay another, upper rubble packing, this, too, consisting of large and small stones, which reached right up to the upper edge of the door, but, unlike the lower packing, filled only the outer part of the stomion, and extended thence in a wedge-shape 1.5 m out into the sand filling of the dromos; the interstices between the stones were not filled with sand. Behind this upper rubble-packing the stomion was empty; only a small arm stretches out in this direction like a feeler from the mass of debris in the chamber, and covers the sandy layer mentioned above. There will be reason to revert to the differences in consistency of the door-filling later on.

The chamber is rectangular<sup>1</sup>, with its long axis in the direction of the doorway and dromos; the dimensions are  $6,2 \times 6,5$  m. The greater part of the underneath of the ceiling has caved in, but its original character is nevertheless quite clear: the chamber had a gable vault, with the ridge along the long axis of the chamber. The eaves are 2.5 to 2.7 m above the floor, the ridge 4.2 m<sup>2</sup>. The floor is some 20 cm higher on the inner side than near the door; in the centre of the chamber it forms a slight hollow. In the floor close to the north-western wall, a grave pit is cut. Even on the walls of the chamber distinct marks of pick-axes, used for cutting the tomb, are noticeable, and traces of stucco, occasionally marked with finger-prints, also occur in several places. Obviously, this stucco covering was, in the first instance intended to smooth out the unevennesses in the walls — and probably also those in the ceiling — which were occasioned during the work on the very soft rock; whether it was originally applied to any large extent on ceiling and walls in order to give a more attractive appearance to the tomb could not be determined.

In the dromos below the surface layer (0.2 m thick) of sand and soil mixed with gravel came a tightly packed filling, consisting of brownish-grey sand and gravel with an admixture of soil, rubble, and some larger stones. This filling was excavated in three horizontal layers; the lowest 0.9 to 1.2 m thick, the intermediate 1 m thick, and the upper, whose thickness increased towards the door (0—3.5 m). The filling then seemed quite homogeneous; it was not until a couple of metres from the doorway that differences of stratification began to appear in the two lower layers, and another metre farther in they became quite distinct (fig. 139); below the rubble packing squeezed out of the door the filling consisted of finer and coarser material, with thin layers of gravel and rubble between. Finally, on the rocky bottom of the dromos began a hard-packed floor layer of limestone gravel, grey in colour, occasionally brownish, and varying in thickness from 0.02 to 0.1 m, as it does outside near the entrance and in the inner part of the dromos. In several places this layer was found to be distinctly stratified; obviously, its lower part had accumulated in the cutting out of the rock, and the rest during the earlier part of the tomb's use (and consequently before the dromos had been filled in), acquiring its remarkably hard consistency by being trampled on and alternating drought and wet. In this were found, at a distance of some 20 cm from the door, some large and small fragments of thin bone (ivory?) plaques (cf. below).

While clearing the considerable filling in the dromos there was found — apart from some unidentifiable bones — a large number of objects (see below):

In layer I (the upper): 4 ornaments or small objects of gold and glass paste, a

<sup>1</sup> The two corners nearest the door are slightly, but yet symmetrically, cut back from the cross-line of the doorway, and thus have slightly acute angles.

<sup>2</sup> This tomb reminds one very much of the well-known chamber-tomb at Spata, in Attica, not only in the gable form of its roof which can rarely be so clearly demonstrated, and the dimensions, but also in the inventory of finds, Perrot, *La Grèce primitive*, p. 412 f. — Cf. also Persson, *The Royal Tombs at Dendra*, p. 75.

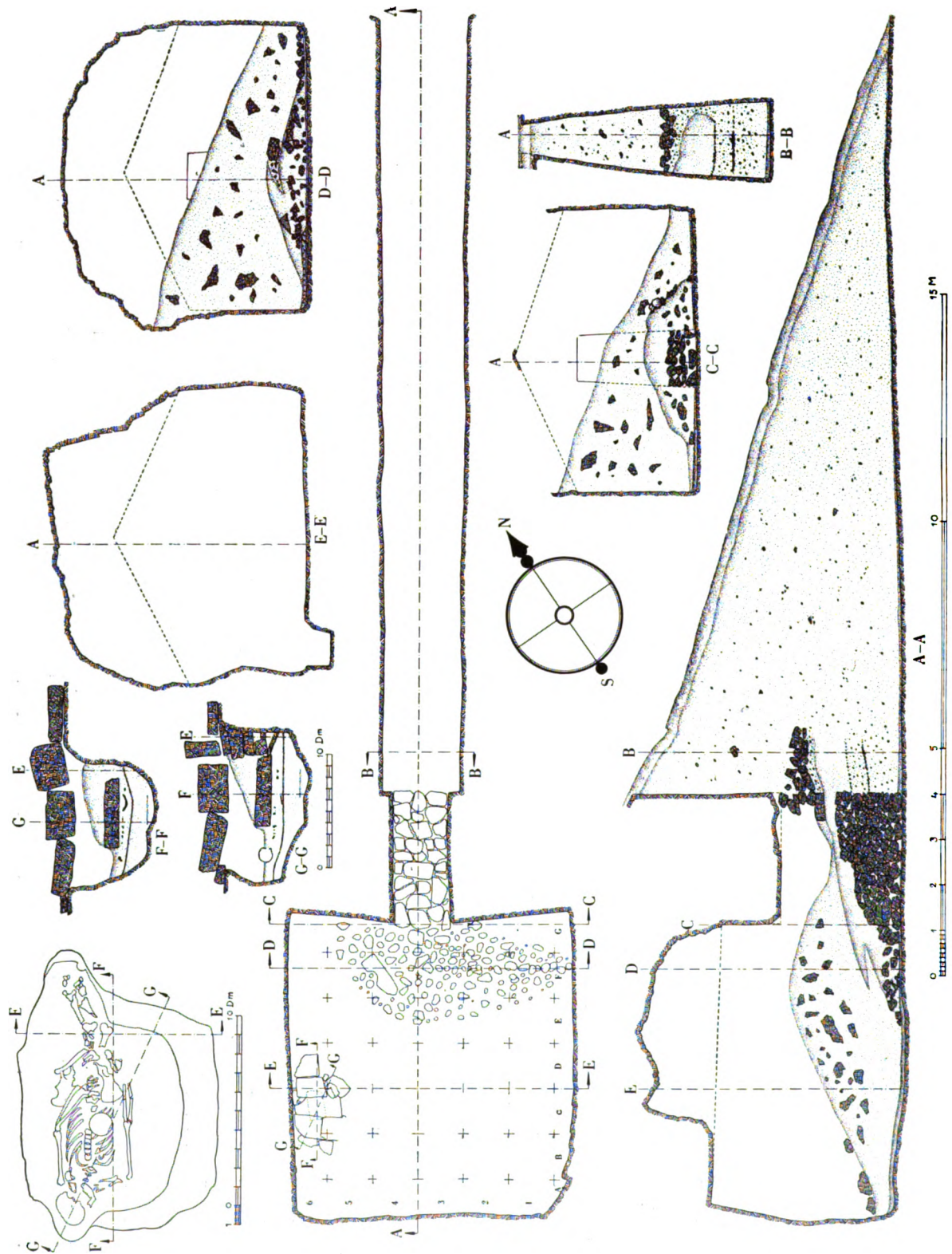


Fig. 139. Plans and sections of Chamber-tomb 2.



large number of fragments of ornaments and small objects made of ivory, 3 boar's tusks (helmet protection) and a fragment of an Egyptian stone vessel of which parts were later found inside the chamber.

In layer II, at the inside end and just on the borderline of layer III: 2 ornaments, one of gould and the other of ivory, as well as a small fragment of gold.

In layer III: 36 ornaments or small objects of gold, glass paste, and ivory, more than 100 small fragments of gold sheets and gold strips, more than 100 large and small fragments of ivory objects, more than about 30 boar's tusks, some fragmentary, and a number of bronze fragments including arrow-heads. Most of the things were found in the lower levels, at the inner end of the dromos; nearest the stone-packing of the door (for a distance of 1 m) the layer was, however, very poor in finds.

The finds are thus very numerous in layer I, and still more so, in layer III, while layer II was strikingly poor.

In the dromos filling were found, finally, a large number of sherds of L. H. vases. Of these, 4 could be reconstructed, namely 1 jug and 3 stemmed goblets (see below). Some of the sherds come from 8 vases, the other parts of which were found later on in the doorway, and more particularly in the chamber itself. I shall revert to this, and also to the circumstance that the jug and one of the goblets probably belong to grave offerings. To a later period belong some Geometric potsherds, found in the two upper layers of the filling.

In the stomion, too, some finds were made. In the sandy layer including the sand which filtered down from it to the rubble below, were found — apart from a number of indetermin bronze fragments, skeletal remains, and charcoal — some ornaments and small objects of gold, glass paste, and ivory, some fragmentary; also, some L. H. sherds, among them of two vases of which pieces had previously been found in the dromos (see above) and the remaining sherds of which were later on discovered in the chamber (see below). In the lower packing, without sand, were found L. H. potsherds and, a number of pieces of an alabaster vase, squat bowl, lying together in an area 0.25 m wide; fragments of these were later found inside the chamber (see below); all these objects lay in such a position, wedged between the stones or rubble, that they cannot be supposed having fallen down from the sandy layer above but must be supposed as dating from the same period as the rubble packing. In the stomion were also found, without being able to mention any particular instances, some gold rosettes and L. H. sherds, some of them belonging to a vase of which the remainder was later found inside the chamber.

In the chamber the collapsed material from of the ceiling, more or less crumbled to pieces, had accumulated into a compact layer, which increased in thickness towards the northern part of the chamber, where it reached a thickness of 2 to 3 m. After this layer had been dug away, the investigations of the layers in the chamber containing finds began.

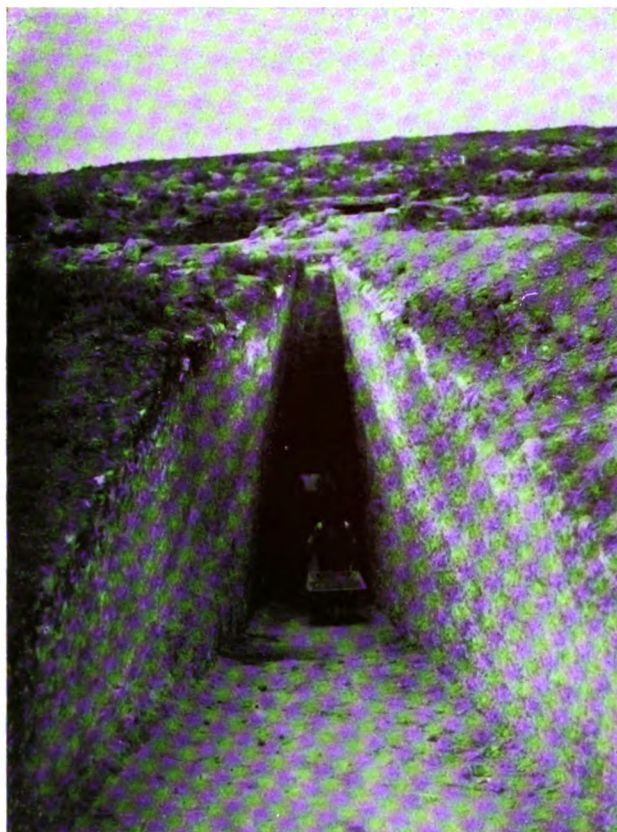


Fig. 140. Dromos of Chamber-tomb 2.



Fig. 141. Dromos of Chamber-tomb 2. Filling partly removed in order to show the door-packing.

The upper part of the original rubble packing of the stomion, as previously stated, had caved in on the inner side and spread like a delta-shaped accumulation over the tomb-layer of the chamber; in here it was partially covered by a sandy layer, which formed a direct continuation of the sandy layer of the door and the dromos filling. Here the sand had succeeded in filtering down between the rubble, in greater quantity, than had been the case in the door, but the interstices between the stones were not yet completely filled. Moreover, it was observable (fig. 139) that the sandy layer had in places intruded itself into the layer of debris, above it, that is to say the sand from the dromos and the debris from the ceiling had formed alternate layers inside the door at this point. It has previously been mentioned, that the sandy layer contained a piece one metre long of the upper part of the western door-jamb, which had fallen down and become imbedded here (fig. 139). The tomb-chamber had clearly stood open for some time.

Some finds the majority of them similar to those previously found in the dromos and stomion, were made in the sandy layer, and also amongst the rubble below it, but normally in such circumstances these, mostly rather small, objects

may very well be assumed to have found their way there together with the sand. Amongst these finds may be noted sherds of the same alabaster vase which had previously been brought to light in the rubble layer of the stomion, including a large piece (together with a couple of smaller fragments) found in a perpendicular position, tightly wedged between the stones, and a few fragments found below a stone and lying on another stone; in other words, in such a position that they must be presumed to have been originally inside, lying in the upper part of the stone or rubble filling of the door, and accompanied it when it fell down into the chamber. Similarly a human shoulder-blade was found, lying below a big stone, i.e. in such a position that it must be considered to belong to the rubble layer, while the numerous other human bones (belong to at least two corpses) lay, in no sort of connection with each other in the sand above or between the stones. Amongst the finds occurred some pieces of the same Egyptian stone vessel of which a fragment had been found in the dromos and other pieces were found in the burial stratum of the chamber. Amongst the numerous finds of L. II. pottery are to be noted: parts of three vases of which other fragments occurred both in the dromos filling and in the burial stratum of the chamber; parts of two other vases of which bits occurred in the same places and also in the stomion, and fragments of three vases of which sherds also occurred in the burial stratum of the chamber. Finally, it may be added that a vase was found lying below the compact debris layer from the ceiling, strangely enough, undamaged; the lower part rested on a stone belonging to this layer, while the upper part lay above the surface of the sandy layer (fig. 139); it must, therefore, have reached its place between two different falls of the ceiling.

The burial stratum in the chamber — varying in thickness, but nowhere exceeding 0.1 m — had precisely the same character as the lower part of the corresponding stratum in Chamber-tomb 1, and so contained both disturbed human remains and the same kind of remains and traces of fire<sup>1</sup>. For the numerous finds, reference should be made to the list (p. 359). As has previously been mentioned, there occurred amongst them the pieces of the Egyptian stone vessel and fragments of 12 L. H. vases, of which parts had been found in the sand and rubble layer inside the door, in the stomion itself, and in the dromos. The floor layer of hard-packed limestone gravel being merely a couple of cm thick, did not produce any finds.

Very close to the north-western wall of the chamber of this tomb, as in Chamber-tomb 5 (p. 177) a grave pit was found cut out of the rock (fig. 139) parallel with the long axis of the chamber, 1.5 m long, 1 m wide, and no more than 0.8 m deep; in shape it is an irregular oval with special widenings or enlargements for the head and feet of the corpse. The pit was covered — apart from some rather irregular stones — by five partly dressed (perhaps sawn) limestone ashlar blocks, the upper surface of

<sup>1</sup> Such were later observed also in Chamber-tomb 7 (p. 186).



which was about on a level with the surface of the burial stratum, or slightly raised above it. In the N.W., these ashlar blocks rested on the edge of the pit, but at the opposite side chiefly on several smaller slabs and stones, placed on edge close to or in front of each other, or piled on top of one another along the wall of the pit, and in their turn resting on the burial stratum in the pit, partly on the slab which was found in this and to which I shall revert later on.

When the covering slabs had been removed, a human skull appeared at the W. end at the bottom of the grave. Some sand and soil had filtered down from above, and in this were found, among other things, parts of two vases; sherds from one of these had also been found in the burial stratum in the chamber, in the layer of sand and rubble inside the stomion, and in the filling of the dromos (p. 165); I shall revert to the other at a later stage (when dealing with the pottery finds from the bottom layer of the grave pit). When the soil had been removed, a skeleton was uncovered, at a depth of 0.4–0.6 m, lying on its back, with the head to the S.W., the left hand lying across the pudenda<sup>1</sup>, the right arm stretched out along the side (the bones of the hand crumbled to dust); the legs had been drawn up and crossed — as it seems — with the left knee over the right. Directly over the middle of, and closely above, the skeleton lay a square slab with rounded corners (0.6 m long, 0.4 m broad, and 0.13 m thick), clearly placed there purposely (to prevent the dead person from »haunting the earth«?). Immediately below the skeleton was observed a decidedly brownish layer of sand 1 cm thick, extending the whole width of the pit, and this sand seems to have got its colour from some decayed matter below the corpse.

It was clearly a woman who was buried here, for the corpse had been given a round mirror of bronze (p. 390), which was found immediately on the lower right ribs with minute fragments of the wooden handle still adhering to it; under the mirror and also attached (by oxidation) to the back of it were found shreds of some fabric, clearly part of a dress. Below the brown layer of sand lay a large collection of beads and other small ornaments, concentrated — in so far as they were found *in situ* — in a small, shallow hollow in the bottom of the pit, where — though without demonstrable connection with each other — they formed a complete oval-shaped layer (0.25 × 0.15 m) at a depth of 0.17 m below the right pelvis of the skeleton.

The deceased's collection of trinkets had thus been placed below her in the bottom filling of the grave pit. This consisted of the same grey limestone gravel that formed the main part of the tomb-layer of the chamber, and did not yield any other finds than some charcoal, a few bronze fragments, a human kneepan, and some L. H. potsherds, a couple of these being from the same vase of which fragments had previously been found in the dromos filling, in the stomion, in the sand and rubble layer inside the latter, in the burial stratum of the chamber, and, finally, in the

<sup>1</sup> Cf. Wace, *Chamber Tombs*, p. 139.

filtered soil in the upper part of the pit (see above). Obviously these objects come from the nearest parts of the burial stratum of the chamber, which, after the cutting of the grave pit, had been used as filling in the bottom of the pit in order to make an even bed for the corpse.

The author, who had an opportunity to participate himself in the excavation of this chamber-tomb, from the beginning to the end, has supplied in the foregoing pages a detailed account of the observations made. From these the following summary conclusions may perhaps be drawn.

The arrangement of the layers inside and outside the stomion indicates clearly that this has been opened and then closed again, the layer without stones or rubble between the two rubble packings representing the time during which it stood open. In the lower (older) of these rubble packings, however, some objects were found, fragments of an alabaster vase, and some potsherds in such a position that they can on no conditions or circumstances be supposed to have dropped from above between the stones, but must have got to their place at the same time as the rubble packing was put in. In the collapsed upper part of the same rubble packing were found more fragments of the same alabaster vase, and a human shoulder-blade in circumstances which indicate that these too had originally lain amongst the rubble and accompanied it when it fell down into the chamber. But these objects clearly belong to the tomb-layer or rather to an older tomb-layer in the chamber. Evidently, then, the rubble packing was taken away to allow for fresh series of interments, and the tomb-layer in the chamber was also to some extent cleared away, and the objects under discussion were accidentally mixed up with the stones when these were again laid in position. The dromos was then filled in again, for in order to gain access to the tomb-chamber it, too, had to be cleared, at least the part near the door. A great many of the objects were found in Layer III (p. 165), that is to say just in this inner and deepest portion of the dromos, in a layer 10 cm thick lying on top of the hard-packed floor-layer of limestone gravel. Probably, the rubble packing was destroyed to the same height; but the fact that its lowest course had been allowed to remain undisturbed is apparent from the floor-layer which was a few cm higher on the side facing the dromos.

At some later period the chamber was once more made accessible by breaking down the rubble packing, but this time only the upper part of it, fallen stones from which, as previously mentioned, were now discovered inside the stomion. After that the chamber was once more, and more demonstrably, emptied of its contents. Among the many objects that must have been removed from the chamber at this time particular attention should be paid to the fragment of the Egyptian stone vessel found in the dromos, of which others were found both in the sandy layer inside the door and in the burial stratum of the chamber, and, secondly, to the numerous potsherds, found in the dromos, belonging to vases of which other fragments were

likewise found both in the stomion and in the chamber. That they originally belonged to the burial stratum inside the chamber is obvious.

This time certainly — as in fact was the case with regard to Chamber-tomb 7 (p. 188) — only the upper, inner part of the dromos was cleared out, approximately down to the upper edge of the lower section of the rubble packing. No concentration of finds to this level could be noted, however, and on the whole the filling of the dromos showed — except in its inner, deeper part — a remarkable absence of stratification; it was, at least to the eye, perfectly homogeneous<sup>1</sup>.

It has already been pointed out that the tomb-chamber must before this have stood open for some time. During this period the sandy layer connected with the filling of the dromos was washed down by rain-water into the stomion and inside the door, and there had been deposited on top of and between the stones. On the other hand, free access to the tomb even during a short period of time may naturally have invited the visits of trespassers and these may have caused some of the damage.

Especially the skeletal remnants were found to be in disorder. It can only be said with certainty that they were the remains of two persons, but it is, of course, also possible that other skeletons had been buried there, but had, subsequently, been removed from the tomb.

The only skeleton in an undisturbed position, then, is that in the grave pit. Clearly it must have been for the woman there buried that the tomb-chamber was opened and its deposit partly cleared away, of course following the clearance of the debris that had probably already accumulated by the gradual desintegration of ceiling and walls<sup>2</sup>. To prove, stratigraphically, that such disturbances did take place in the deposit which, at least theoretically, should have arisen during the making of the pit, immediately around and above it, was of course impossible on account of its slight thickness and thoroughly disturbed condition. But the dating here given of the grave pit in relation to the burial stratum is supported not only by probability, but also by the observation, already mentioned in the account of the investigation of the pit, that the deeper part of the pit, below the skeleton, had been filled in with loose material, evidently taken from the tank-deposit close at hand which contained among other things sherds, joining up with others which had found their way right out into the dromos during the clearance of the chamber.

When the covering slabs of the grave pit had been put in position, and the door closed up, the dromos was once more filled in. The two vases found in the upper part of the filling (p. 165), which are later in date than any of the others found in the tomb, were apparently offerings to the dead, probably in conjunction with the last burial (cf. pp. 357 and 381).

<sup>1</sup> It was excavated in two halves, along the longitudinal section (fig. 139).

<sup>2</sup> It is by no means improbable that just in view of this collapse and the tendency for new ones, the relatives of the dead found that a pit covered with slabs would make a safer resting place for the deceased than the floor of the chamber could offer.



## CHAMBER-TOMB 3

This tomb, which was excavated in the spring of 1924, is situated about 25 m W.S.W. of, and above, Chamber-tomb 1 (fig. 131).

The dromos, which runs N.E.—S.W. (with the entrance to the N.E.) rises very noticeably (1 m : 4 m) from the entrance inwards for about half its length; further in, the floor is on the whole horizontal. The length is 8.5 m and it widens inwards so that at the entrance its width is 1 m, near the door 1.6 m; the height is there 3 m reckoned from the surface of the rock. The sides are very pronouncedly concave. In the south-eastern wall, 2.3 m from the door, a niche is cut out, and more will be said about this later on. The opposite wall was found to be very much delapidated and crumbled away which also spoiled or destroyed both the lintel of the door with the adjacent portion of the north-western side and parts of the ceiling and walls of the chamber.

The doorway is 0.8 m wide at the bottom and 0.6 m deep. From the parts that remain it is possible to gather that it tapered slightly upwards. In the doorway, and 0.5 outside in the dromos, was found a 0.7 m high accumulation of rubble on the floor, the lower part of the door-packing.

The chamber, which is set slightly obliquely in relation to the dromos, is irregularly square in shape; the dimensions are  $2.2 \times 2.5$  to 3 m, with an original height to the ceiling fully 2 m. The floor is on a level with that of the inner part of the dromos.

In the fill of the dromos, the top layer was 0.4—0.5 m thick and consisted of humus, mixed with gravel and rough stones, below which began the fill proper, consisting of unstratified, reddish-brown gravel, mixed with soil and rough stones, and also some of the debris from the N.W. wall, and, finally, a layer, 0.3 m thick, of hard-packed, grey limestone gravel, of finer consistency nearest the floor, where there was an almost unnoticeable transition to the somewhat disintegrated surface of the rock. This layer of limestone gravel was of the same character as the corresponding layer in the dromos leading into Chamber-tomb 2 (p. 163). In this were found a few scattered L. H. potsherds, including fragments of two vases found in front of the niche to be described below; furthermore some indeterminate pieces of bone.

The same layer of soil and reddish-brown gravel also filled the doorway — where some L. H. and Geometric potsherds were found — and continued into the chamber, which was filled with it almost up to the ceiling. In this fill there were also large and small pieces of rock, fallen from the ceiling, the walls, and the upper part of the door. In the layer of soil, which increased in thickness towards the sides (fig. 142), occurred some L. H. and Geometric potsherds. Bones of birds or other small animals also occurred. In the reddish-brown layer of gravel, which here — in contrast with the same layer in the dromos — continued right down to the floor, there occurred also similar animal bones, and, in its lowest stratum, some L. H. potsherds. Near the door lay some large stones, clearly fallen from the door-packing.

The niche mentioned above in the south-western wall of the dromos measures 1.1 m in width, 0.7 m in height, and 0.5 to 0.6 m in depth; its bottom lies 0.30 to 0.35 m above the floor of the dromos. Originally its opening had been closed by a wall of stones piled upon each other, but the upper part of this stone packing had been pushed in by the filling of the dromos, and the stones from it were found lying on the bottom

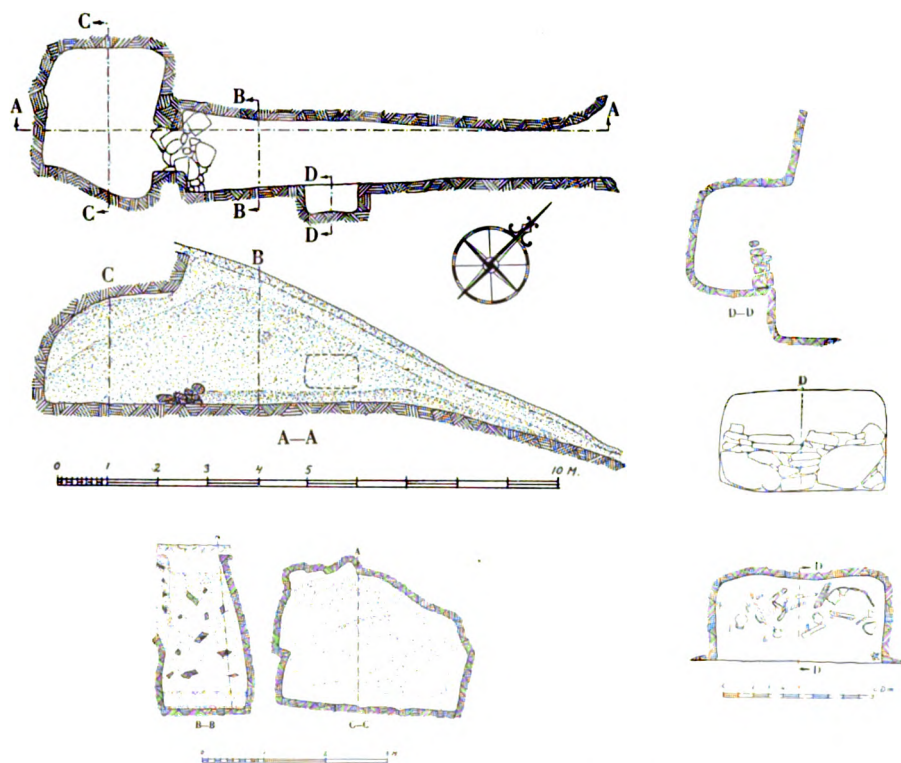


Fig. 142. Plans and sections of Chamber-tomb 3.

of the niche, inside the still remaining part of the wall. The reddish-brown gravel layer of the dromos now completely filled the niche also.

On the floor of the niche were found, firstly much-decayed human bones, and, secondly, three L.H. vases and one glass bead (p. 392 and fig. 142). The bones and the burial offerings had been disturbed from their original position, and partly crushed when the stone packing of the niche-opening collapsed.

The absence of a grave deposit in the chamber is remarkable. It is so complete in fact that it cannot be explained as the result of the depredations of grave-robbers; in that case some less conspicuous objects and bones would of course have been left. This would, probably, also have been the case if the chamber had been cleared of remains from older burials to make room for a fresh one. If a tomb-layer had thus been swept out of the chamber, some of it, too, should have been found in the dromos (cf.

Chamber-tomb 2); here the finds made in the bottom layer were too scanty trifling to admit of such an explanation.

In such circumstances it might be assumed, in the first instance, that the chamber — because of the poor consistency of the rock — had never been used as a tomb, but to this the objection must be made that the stone packing of the door, which was partly *in situ*, and partly collapsed, would not have been put into position except in connection with a burial, that is to say, immediately after such had taken place. Is it possible, perhaps, that the human bones and the burial offerings found in the dromos niche originally lay in the chamber, but when this was found to be far too unsafe a protection, were removed thence and piously placed in the niche intended for this very purpose? No conclusion could be drawn from their position on the floor of the niche, because of the disorder and damage caused by the collapse of the stone filling.

In either case the caving-in that afterwards took place, had been anticipated, or the poor consistency of the rock had already begun to make itself noticeable by partial falls of rock.

This is certain, that the niche was cut in the south-eastern wall, where the rock is clearly firmer, and a burial, possibly translated, took place in it and the opening then closed by the stone packing.<sup>1</sup>

The dromos was then filled in with the reddish-brown gravel, and the pieces of rock from the collapsed north-western wall. During this process the rubble packing of the niche was subjected to such pressure that it was forced into the niche which became completely filled with the gravel that made its way in. The chamber, too, became partly filled with it. Finally, soil was also gradually washed down from the slope of the hill, and formed the highest layer in the dromos, and also penetrated into the chamber, after falls of rock and settlements had made it accessible.

#### CHAMBER-TOMB 4

This tomb is situated below Chamber-tomb 1, and 8 to 9 m S.E. of Chamber-tomb 2 (fig. 131). After trials had been made in the spring of 1924, it was excavated in the spring of 1926.

The dromos is oriented N.E.—S.W. (with the opening to the N.E.), and measures 11 m in length.<sup>2</sup> At its inner end, the height is something like 4 m, reckoned from the surface of the rock. Its floor rises very gently (0.25 to 0.35 m in 5 m) from the opening to approximately the centre, and then slopes down again to the same level. At the same time it grows more uneven where a ridge of harder limestone has been left. Further in, this harder rock rises gradually more and more (fig. 143), and this was

<sup>1</sup> Here, there is no connection with tomb cult, as is the case, on the other hand, with the small niches in Chamber-tombs 4 and 5. Cf. Nilsson, *The Minoan-Mycenaean Religion*, p. 517 ff.

<sup>2</sup> It is to be regretted that two drawings (the cross section and the plan of the dromos) have been lost. The width of the dromos and the mouldings of the side-walls are, therefore, not given in fig. 143.



clearly the reason why no chamber was cut. Instead of the chamber a burial niche was cut in the north-western wall of the dromos.

Below the surface layer of humus, the dromos fill had an upper layer, maximum 1.5 m thick, of stones and rubble; the interstices between these stones were partly filled with soil that had filtered down from above. Below this began reddish-brown

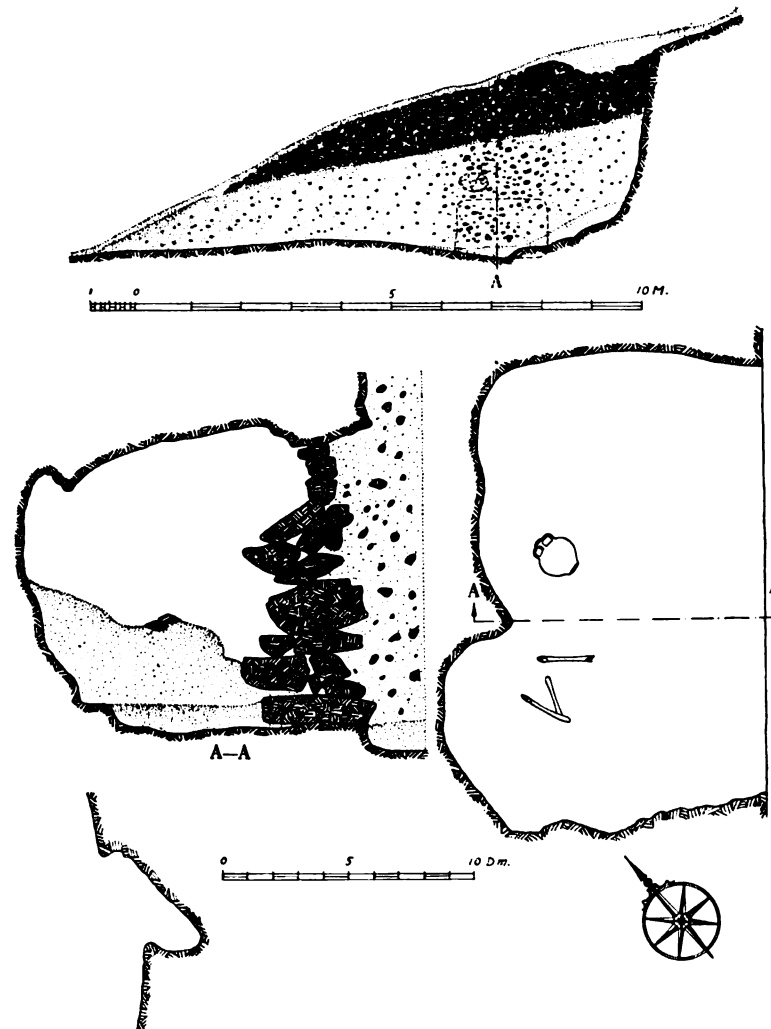


Fig. 143. Plan and sections of Chamber-tomb 4.

gravel with small stones. In the inner half of the dromos, this gravel covered a 0.2 to 0.3 m thick stratum of finer gravel of a greyish-green colour.

In the filling of the dromos a good many L. H. potsherds were found, as well as some indeterminable bone fragments.

In the inner part of the dromos a niche is cut in the north-western wall (fig. 143); its bottom lies 0.1 m above the floor of this part of the dromos, but about 20 cm be-

low the protruding harder rock already mentioned. It measures 1.9 m in width, maximum 1.2 m in height, and 1.4 m in depth; the inside of the niche was originally somewhat smaller than it is now in that pieces of its ceiling and walls had fallen and were now lying on the bottom layer, there forming an accumulation of nearly 0.7 m in thickness (in the northern part of the niche). This bottom layer was 0.1 m thick, gravelly and of a brownish colour. In it were found a smashed stirrup-vase and three badly preserved pieces of bone, lying in no definite arrangement (fig. 143). The square opening of the niche closed with stone packing.

Lying obliquely to this niche, and slightly above it, in the opposite wall is another niche (fig. 143), though of very small dimensions: the height and width (in the oval opening) are respectively 0.35 and 0.60 m, the depth only a trifle more than 0.2 m. This was filled with four stones and soil.

Had the builders perhaps intended to make a larger burial niche, but for some reason left their work unfinished (excessive hardness or other unsuitable features of the rock?). This is not probable. The regular shape of the cavity and the deepened bottom bear clear evidence that it was finished and built for some definite purpose. It was certainly intended for sacrifices or for some other ritual in connection with the tomb in the opposite wall. Chamber-tomb 5 also has such a niche, which must undoubtedly be considered a sacrificial niche (p. 178), and that sacrifices to the dead were placed in the actual dromoi is shown by the finds made both at Asine and elsewhere (p. 170). In this niche, certainly, no palpable traces of sacrifices were found, but these might naturally be of such a kind as to have been completely destroyed. It should be noted that the loose fill in the niche consisted of soil. It may also be mentioned that a good deal of rubble occurred in this part of the dromos, in the reddish-brown gravel between the two niches, and right up to the compact rubble layer above, indicating that on some occasion after the burial in the large niche and the filling in of the dromos someone had dug down at this point; that the object of this was not the plundering of the latter niche is plain from the fact that its rubble packing was untouched.

#### CHAMBER - TOMB 5

This tomb is situated right up in the west of the necropolis, about 70 m W.N.W. of Chamber-tomb 3 (fig. 131).

The dromos, which is oriented E.N.E.—W.S.W. (with its entrance to the E.N.E.) measures 9 m in length, scarcely 1 m in width at the entrance, but 1.5 m near the door, the height there being 3.6 m, reckoned from the surface of the rock. The sides are rather pronouncedly concave. In the northern one, at a distance of 0.5 m from the doorway, is a small niche, of which more will be said later. The floor of the dromos slopes quite evenly inwards, so that its level at the door is roughly 1 m lower than near the entrance.

The door, which in the course of time has lost most of its sharp outlines — the rock is remarkably soft, and conglomerated — is 0.9 m deep and 0.85 m wide at the bottom; as usual, it tapers slightly upwards. Its original height may have been 1.5 m, now it is, at the outer end near the dromos, 1.6 m, rising inwards towards the chamber to 2 m. It was closed with rubble packing, thin at the top, but more solid towards the floor, where it had a thickness of 1.1 m. Here, the lower strata projected 0.5 m out into the dromos, filling its entire width.

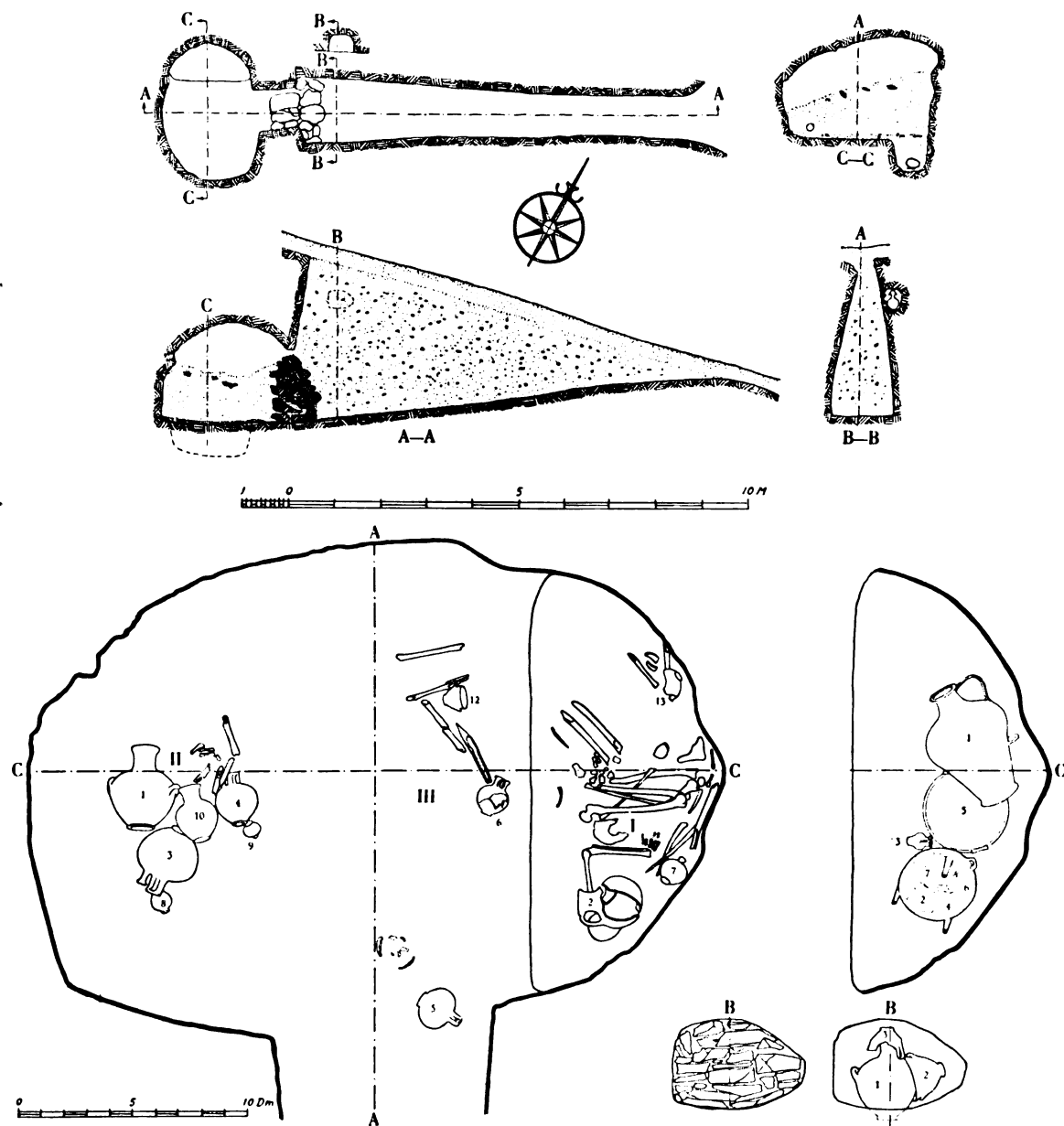


Fig. 144. Plans and sections of Chamber-tomb 5.



The chamber, which is symmetrically placed in relation to the dromos, but with its long axis not quite at right angles to it, is in shape oval, measuring  $2.1 \times 3$  m. The height of the ceiling originally did not exceed 2 m; now, owing to falls of rocks at various times it is 2.25 m. In the floor of the north-western part of the chamber is a grave pit.

Below the surface layer of humus came the real fill of the dromos, consisting of gravel and rubble, derived to judge by appearances, from the excavation of the same. In this fill were found some L. H. and Geometric potsherds. In the bottom layer, just outside and in the door, Minyan and Hellenistic potsherds also occurred, together with some pieces of bone and a fragment of a clay statuette.

Inside the chamber, the debris fallen from the roof lay accumulated into a layer sloping evenly from N.W. to S.E., which was thicker to the N.W. (1.3 m) than to the S.E., where it was only 0.4 m. Below this came a 0.1 m thick layer of soil, mixed with gravel and rubble, spread over the floor, the original burial stratum of the chamber, but this had been much disturbed by the caving-in of the roof, so that human bones and artifacts now occurred lying not only in and on top of this but, also, in some cases, mixed up with the lowest levels of the collapsed material.

Just inside the door lay a stirrup-vase, parts of a human skull, a decorated ivory ornament, and a glass bead; in the south-eastern part of the chamber, were found two amphoras and four stirrup-vases, together with a number of human bones lying in disorder, all close together (fig. 144); farther to the N.W. were more human bones, also in disorder, a cup, and a stirrup-vase, as well as a small, very thin, broken and crushed-together gold ring, and a decorated ivory ornament; and in the extreme N.W., finally, plenty of disordered skeletal remains and a number of vases, amongst them — along the wall of the chamber — a large amphora, a stirrup-vase, a kylix, and a cup (p. 394 ff.).

Below the amphora was found a skull, which proved to belong to a human skeleton, lying in an undisturbed position, though the bones had been partly crushed by the collapsed material from the ceiling. It lay turned to the N.W., in a crouched position on the right side, therefore, and with the head to the N.E., with the legs very much drawn up, the left arm bent with the hand over the pudenda, the right arm stretched straight down.

During the investigation of the skeleton the grave pit mentioned above was brought to light (fig. 144). This is oblong in shape running N.E.—S.W., with a length of 1.8 m and a maximum width of 0.8 m; the side facing the chamber is straight, the others follow the curving of the chamber wall. The cauldron-shaped, rounded bottom lies 0.7 m below the surface of the chamber floor. The filling consisted of gravel and rubble, mixed with earth.

The deeper lying bones of the skeleton were found in the upper part of the pit.

Immediately below was found a crushed human skull and, a little deeper still, a collection of 8 bronze vessels: a large hydria, lying on its side; about 20 cm to the east, and upside down, a cauldron with three feet; a basin between this and the hydria, and partly covered by the latter, also upside down; close to the cauldron a small jug lying on its side; below the cauldron, a jug, this, too, lying on its side, a spreading bowl almost overturned, and finally, below the last, a small lamp, also turned upside down, and a basin; this last lay far down on the very bottom of the pit. Close to the cauldron and the first mentioned basin lay three small pieces of decorated sheet gold, and in other parts of the pit were found a bone rosette, a spiral-shaped pendant of the same material, and another of glass paste (p. 393 f.).

The smaller of the two jugs had its mouth closed with a naturally rounded pebble stone. When this was removed the jug was found to be more than half filled with beads of gold and glass paste of several kinds, numbering altogether 660 (p. 398 ff.), 240 of them being of gold; moreover, it was found that the threads between the beads were still partly preserved by the verdigris from the walls of the bronze jug, and thanks to this circumstance it could be ascertained that they had formed four different necklaces.

The undisturbed skeleton was clearly the last to be buried in the chamber, the remains from the previously buried corpses, two in number, as is shown by the two skulls, having been swept aside or at any rate disturbed, together with their burial gifts. From the position of the latter, therefore, no probable conclusions can be drawn as to their connection with one or the other of the two individuals. To the undisturbed skeleton probably belong, on the other hand, some of the objects found in the north-western part of the chamber, namely the vases found in the deposit above the grave pit. Whether this is also the case with the bronze vessels now found in the grave pit, and the other objects, is more uncertain. For between them and the skeleton lay one of the two skulls, and if this may be assumed to have been in its original place — which there is nothing to disprove — it must come from an earlier burial in the upper part of the pit. If this is the case, the bronzes, etc. could have been deposited on that occasion, and the pit itself also have been dug then. Of course, it is also possible that both the objects and the grave pit belonged originally to a still older burial, in other words, that the third person, of whom remains were found in the tomb-chamber, was originally buried in the pit.

The niche, already mentioned (fig. 144), in the northern side of the dromos is quite small and more or less round in shape. Its dimensions are: width 0.55 m, depth 0.45 m, height at the mouth 0.4 m, inside 0.45 m; it lies 0.6 m below the edge of the side (rock) and, remarkably enough, 2.4 m above the dromos floor.

The mouth of the niche was carefully closed with a rubble packing, the cracks and interstices of which were filled in with blackish earth, which, moreover, not only

continued nearly 0.5 m out into the dromos<sup>1</sup> but was also found, on the removal of the rubble packing, to fill the interior of the niche except for the space occupied by the three vases, post-Mycenean or Proto-Geometric, which were found there; these were an amphora standing upright, inverted, on top of it, as a lid a small cup with one handle, and, lying beside, a crater, with its mouth pressed against the amphora (p. 398). Some of the earth had penetrated into the amphora through a hole which the rubble packing of the niche mouth had made in it, but beneath it was half-filled with burnt earth and calcined animal bones. Finally, among the soil in the niche was found a small clay idol in the shape of a cow's head.<sup>2</sup>

Here we have clearly a sacrifice to the persons buried in the chamber. It should be noted here that the height of the niche above the floor of the dromos indicates that it had been cut in the wall after the door of the chamber had been closed and the dromos, at least partly, become filled in. In reality it had probably been completely filled. The vases belong to a later period (the transition to the Geometric period) than those found in the chamber, and it is not likely that the dromos was left only partly filled in for any length of time after the last burial in the chamber. Probably, part of the dromos fill has cleared away,<sup>3</sup> the niche cut, and the offerings placed in it, after which the pit was again filled up. That this is what happened in Chamber-tomb 4, has already been pointed out (p. 175).

#### CHAMBER - TOMB 6

This tomb, which was excavated in the spring of 1924, lies, like Chamber-tombs 2 and 4, immediately below Chamber-tomb 1, and 6 or 7 m N.W. of 2 (fig. 131).

The dromos, which runs from N.E. to S.W. (with the opening facing N.E.) measures 11 m in length, 1.2 m in width at the opening, 1.1 m at the centre, and 1.4 at the door, the height being here 4.5 m, reckoned from the surface of the rock. The northern side is straight, the southern very faintly concave. The surface of the floor has not a uniform slope. From a spot 2 m from the door it rises gently (0.35 to 0.60 m in 5 m), both inwards towards the chamber and outwards towards the entrance, and at the latter end a harder piece of the rock was left in the cutting, and this now protrudes obliquely upwards towards the northern side.

The well preserved stomion has a depth of 1.7 m and a height of 1.8 m at the outer end, 1.9 m at the inner; the width near the floor is 0.85 m, but decreases slightly, as usual, towards the top. Its outer part, together with the inner part of the dromos, was closed by rubble packing, 1.3 m thick near the floor, thinner above; the interstices between the stones of the outer part were filled with sand and gravel.

<sup>1</sup> In this earth no sherds occurred; but sherds, however, as has been already stated, were found in the rest of the dromos fill.

<sup>2</sup> This did not appear until the earth had been sieved and, consequently, its precise position in the niche cannot be given.

<sup>3</sup> The earth in the dromos, outside the rubble packing of the niche, may also indicate this.



The chamber, more or less oblong with rounded corners, is unsymmetrically placed in relation to stomion and dromos. Its dimensions are (near the floor): Length (N.W.—S.E.) 2.3 m, width 2.1 m, height to ceiling (in the centre of the chamber),

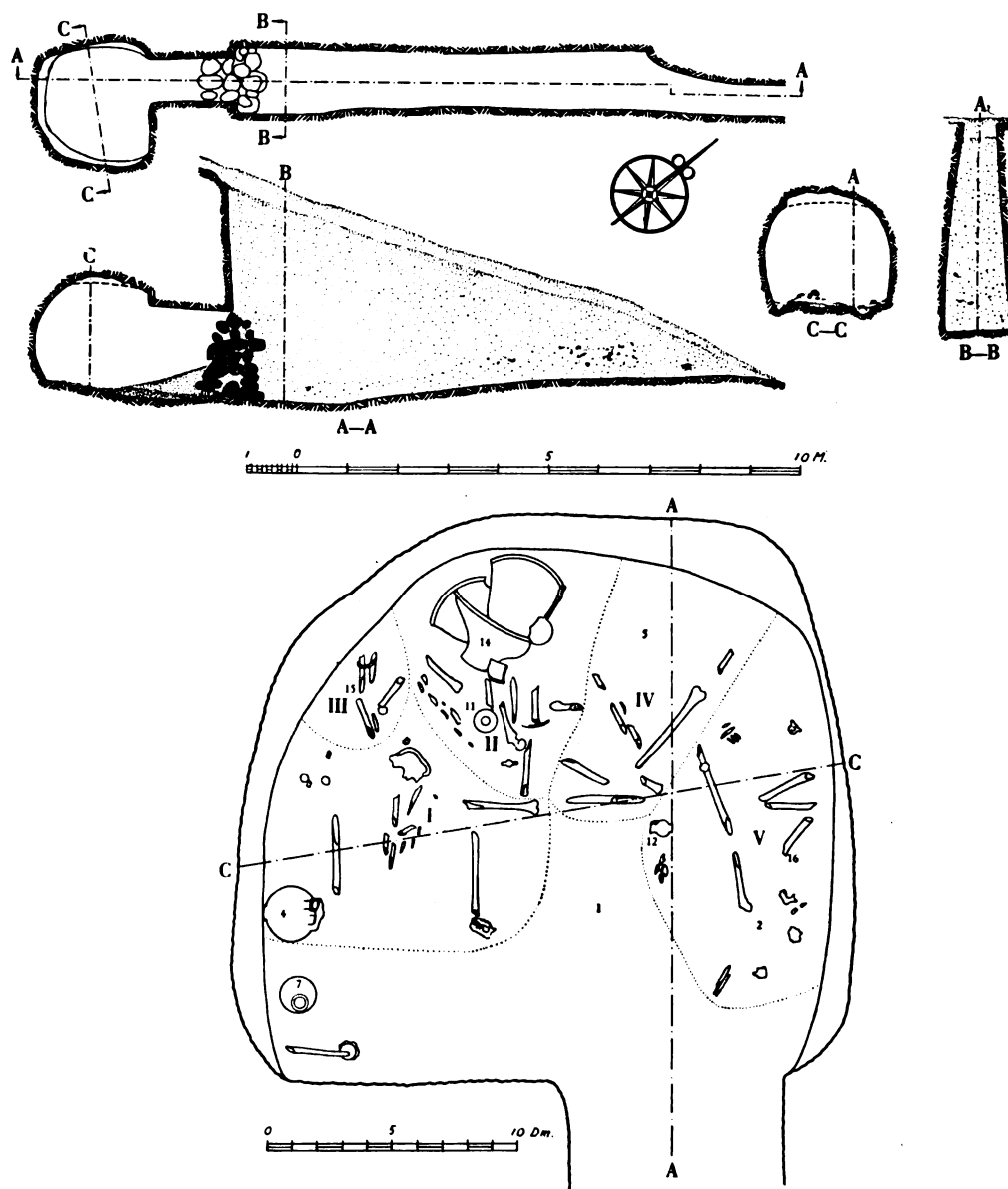


Fig. 145. Plans and sections of Chamber-tomb 6.

originally probably fully 2 m, but now, on account of the crumbling away of the rock 2.3 m.

Below the 0.2 to 0.3 m thick surface layer of humus, there commenced the fill proper of the dromos, consisting of gravel and rough stones. In this were found,

apart from some pieces of bone a gold rosette and an ivory bead, as well as some L. H. potsherds,<sup>1</sup> besides a few Minyan and Geometric potsherds, whose presence in the fill was clearly only adventitious.

When the rubble packing of the door was removed, some L. H. potsherds were found, one of them lying on top of the packing; the interior of the tomb at first sight gave the impression of being comparatively untouched; particularly since skeletons and vases were lying round the walls in an apparently undisturbed position. A closer investigation showed, however, that both in large parts of the chamber and in the inner part of the doorway a layer of debris, composed of material fallen from the ceiling and walls, covers the burial stratum proper, which in the E. part of the chamber was 0.2 m thick. And when these layers of debris had been removed, and the reddish gravel and burial layer containing rough stones lay exposed, it was found that the bones and objects lying near the top had not only been disturbed and moved from their places when the ceiling partially caved in, so that, e. g. they could have been forced into the layer of debris, but also in fact suffered considerable damage; this was especially found to be the case with the fragile human bones, which came to light in different places in the chamber, and which seem to have belonged to four, possibly five, persons.

The burial stratum, which had a thickness of 0.1 to 0.2 m, rested directly on the floor, i. e. the rock which, especially in the chamber, has a very uneven surface.

In the doorway, inside the rubble packing, were found in various places some pieces of bone, a stirrup-vase, and some L. H. potsherds, and several ornaments, namely a gold rosette, a gold bead shaped like a grain of wheat, and another gold bead, a bead with fluted edges and another ornament of glass paste, as well as fragments of gold, silver, and bronze.

Immediately to the left, inside the doorway, lay two gold rosettes, and still, farther to the left, right in the eastern corner of the chamber, the bottom of a vase, as well as a leg- or arm bone. In the central and south-eastern part of the chamber were found more human bones, part of a jaw-bone, leg- and arm bones, as well as parts of pelvis, spine, and thorax, which are probably the very fragmentary and disturbed remains of one skeleton (fig. 145), which had lain with the head towards the north. S.W. of this lay some more human bones, mostly leg- and arm bones, which appear to have belonged to another skeleton (I, fig. 145). S.E. and S. of these two collection of bones, close to the wall of the chamber, and in complete disorder, lay a third collection (III, fig. 145) of leg- and arm bones, teeth, and small bones, which looked as if they had been purposely pushed aside to make room for a fresh burial.

<sup>1</sup> Some of these potsherds were found later to belong to two vases from the chamber; they had clearly found their way out of the chamber in some way and into the dromos, possibly in connection with some fresh burial, when, perhaps with the intention of making more room, some of the burial stratum was cleared out of the chamber — to what extent it is, of course, impossible to judge. That the potsherds were removed from the chamber during a raid on the tomb, is, on the other hand, less probable. The meticulous manner in which the rubble packing in the door was replaced, indicates that the tomb, at least after the last burial, had remained untouched.

These bones were placed on top of the layer of debris that covered the two collections of bones just mentioned, I and II, and, consequently, would seem to have reached their present position later than those, on the occasion of some later burial in the chamber. In the western part of the chamber also were found remains of, probably, two persons. Here, slightly towards the S., lay a great number of bones (IV, fig. 145) and others lay just N. of there, along the north-western wall of the chamber, on the right hand side inside the doorway. On a bed formed by a rocky ledge projecting from the wall, and completed on the tomb side by rubble masonry, lay a collection of bones (V, fig. 145), which seem to have belonged to a skeleton placed with the head to the N.E., towards the door. In this part of the collection of bones lay pieces of skull and teeth, while such did not occur amongst the leg- and arm bones farther to the S.W.

The following objects were found in the chamber (p. 400 ff.).

I. Together with or close to bone collection I: two vases (4 and 7) and some potsherds, fine gold ornaments, a gold bead shaped like a grain of wheat, some fragments of gold rosettes, a bone ornament, 23 beads of glass paste or faience (three shaped as grains of wheat, one as a rosette, and 19 with fluted edges), and three bronze fragments.

II. Together with or close to bone collection II: two vases (11 and 14) and some potsherds, a gold ornament, five beads of glass paste or faience with fluted edges, two steatite buttons, and two bronze fragments.

III. Close to bone collection III: a vase (15), lying on the top of the bone collection, and some potsherds.

IV. Together with or close to bone collection IV: a vase (5), two gold ornaments and a gold bead, three beads of faience (two with fluted edges, one shaped as a rosette), a steatite button, and two small ivory fragments.

V. Together with or close to bone collection V: two vases (2 and 12) and some potsherds, a gold ornament, a bone pin, and a steatite button.

Between the bone collections I and V lay a jug (1) with three-foil rim dating from the transitional period between the L. H. and Geometric periods and apparently originating from the last burial in the chamber (p. 181).

#### CHAMBER - TOMB 7

This tomb is situated in a straight line between Tombs 3 and 5, 30 m from the former and 45 m from the latter (fig. 131). It was excavated in the spring of 1926.

The dromos, which measures 9 m in length, is oriented N.E.—S.W. (with the entrance to the N.E.). At the opening it is 1.5 m wide, but increases evenly towards the door of the chamber, where it reaches a width of 2.8 m. The height there is 4.25 m, reckoned from the surface of the rock. In the outer part of the dromos, the north side is straight, the southern one very faintly concave, but farther in towards



the door the sides grow more pronouncedly concave. The floor rises gently (0.7 m) and irregularly from the door out towards the entrance for a distance of 8 m; the last metre at the outer end again drops gently.

Owing to the extreme softness of the rock the door has lost most of its original outlines. Its width at the bottom is 1.4 m, towards the top, as usual, it tapers, and now terminates<sup>1</sup> in an arc, with a height of 2.35 m above the level floor. The depth of the doorway seems to have been 1.2 m. It was closed by rubble packing, which, however, was not of uniform character (fig. 147). Its lower part—up to a height of about 1.3 m above the floor<sup>2</sup>—was composed of for the most part rather flat stones, large and small; the interstices between them were filled with the same greyish-brown gravel mixed with sand, which occurred in the adjoining parts of the dromos and chamber. Such gravel was also found below the rubble packing, which, consequently, could not have been placed directly on the floor<sup>3</sup>. This part of the rubble packing was generally only one stone thick at the top, but thicker at the bottom having a thickness of 1 m at the base. Inside the doorway, in the bottom layer of the chamber, were also stones of the same kind. The upper part of the rubble packing, again, which measured 1 m in height, was mostly built of somewhat larger stones, laid on each other in two or three piles, and measured at the top 0.75 m, at the bottom 1 m, in thickness. Here, there was no admixture of gravel between the stones. The inner part rested directly on the lower rubble packing, the outer part, again, directly on the gravel filling of the dromos. I shall have occasion to revert to this difference in the character of the door-packing.

Through the doorway entrance is gained into the northern part of the chamber, the long axis of which lies approximately at right angles to that of the doorway and dromos. In this chamber, too, a good deal of material from walls and ceiling had fallen in. However, the original excavation had given it a very irregular shape. Near the floor, the maximum length is 4.25 m, and the maximum width 2.4 m; the corresponding measurements at about 1 m above the floor are 4.8 m and 2.8 m, respectively. The height to the ceiling probably did not originally exceed 2.5 m, now it is as much—just inside the door—as 3.1 m. The floor rises towards the inner (south-western) wall, and its surface is here and there rather uneven.

The dromos fill, which even in its upper layers contained L. H. potsherds, consisted—below a 0.15 to 0.25 m thick surface layer of humus—firstly of greyish-brown gravel mixed with sand, in which pebble also occurred, and, secondly, of a mixture of the same gravel and rough stones. These two kinds of fill differed from one another (fig. 146). The gravel and stone fill, the lower level of which contained more

<sup>1</sup> The small piece of the northern part of the inner door-jamb, which has been preserved, indicates, however, that it had the ordinary flat lintel.

<sup>2</sup> But close to the inner, northern side of the doorway remains of this were found to a further height of 0.5 m.

<sup>3</sup> This indicates, perhaps, that this door-packing was not the first of its kind, but that the door had originally been closed with older packing, placed on the floor itself, which had been removed on the occasion of a fresh burial, and its material re-used, though this time it was placed on the gravel-layer.

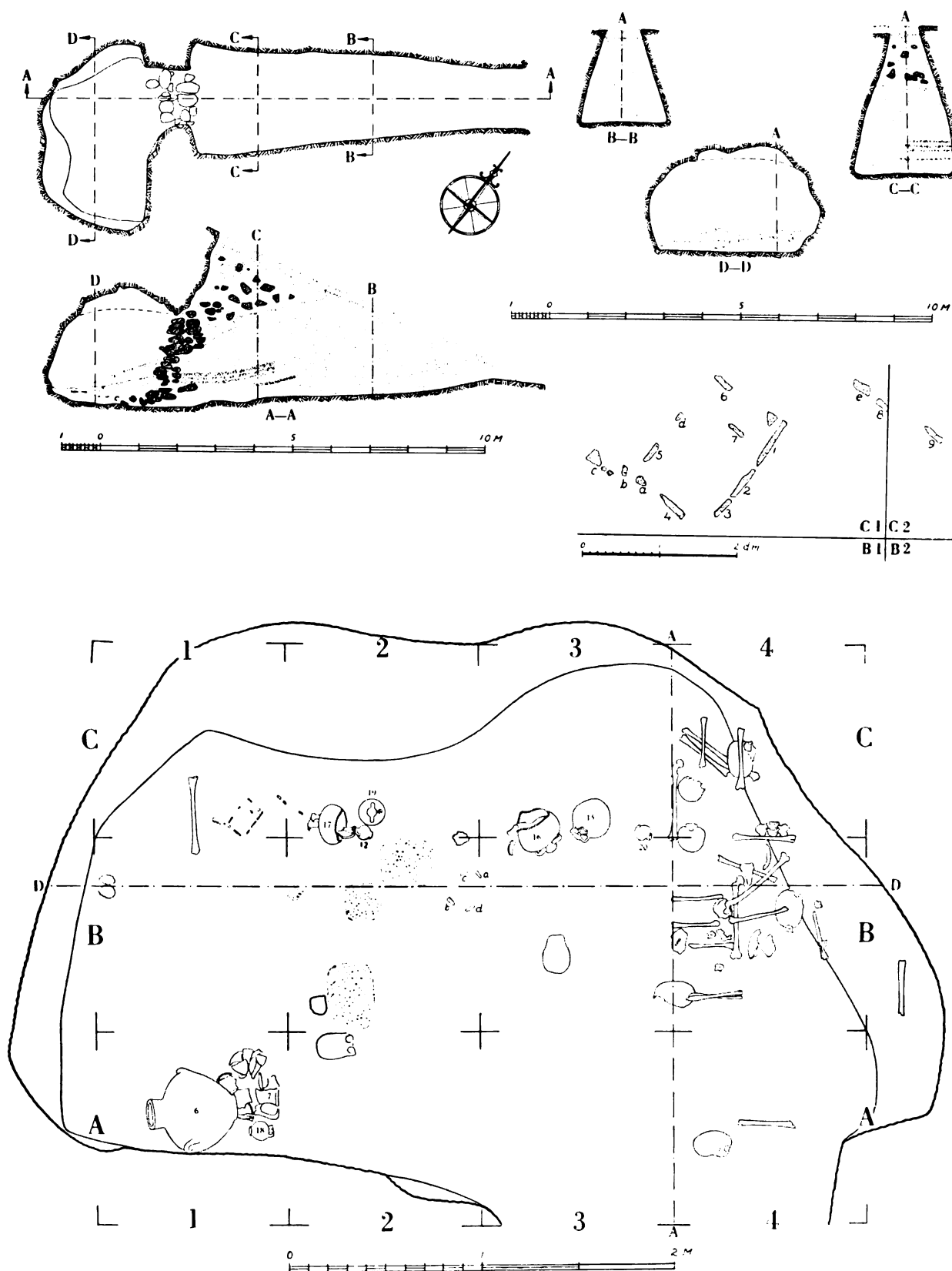


Fig. 146. Plans and sections of Chamber-tomb 7.

and larger stones than the upper ones, was confined to the upper, inner part of the dromos, and inside, near the door, extended down to the bottom edge of the upper door-packing. Here began the gravel fill, upon which the outer stones of this rubble packing rested directly, and which starting at this point and easily distinguishable from the stone fill above it, its depth increasing obliquely towards the surface of the dromos, filled the entire dromos from bedrock upwards. This gravel fill was, however, not quite homogeneous. At a height of 0.5 m above the floor was observed a layer 0.3 m thick, of brown shingle in three courses (the lowest being 0.1 m thick), which extended 2.5 m from the door-packing out into the dromos, and 0.15 m below the outer part of this layer, there occurred over a very limited, area, oval in shape, a layer of greyish-green sand and rubble barely 10 cm thick and 1 m in extent.

It has been stated in the preceding account that the same greyish-brown gravel which was found in the dromos also filled the interstices in the lower door-packing. The same material also formed the bulk of the bottom layer in the chamber, the burial stratum proper. This was almost covered by a greenish layer of debris greatly different in tint, composed of more or less weathered pieces of rock fallen from ceiling and walls. This layer of debris obtained its greatest thickness (0.4 m) just inside and to the left of the door; it gradually grew thinner towards the inner part of the chamber and, close to the wall to the extreme S. and S.W., left a 0.5 m strip of the burial stratum uncovered.

This rested directly upon the floor and covered the entire chamber, though it varied considerably in thickness, 0.50 to 0.75 m in A 3 and A 4, 0.60 to 0.65 m in B 3 and B 4, 0.18 to 0.35 m in C 3, and 0.5 m in C 4; in the inner half of the chamber the thickness decreased considerably, also towards the centre, 0.14 to 0.18 m in B 2, 0.15 to 0.20 m in B 1 and C 2 (but only 0.09 m at the dividing line between B 1 and A 1—B 2), and 0.18 m in A 2, decreasing thence to 0.04 or 0.05 m in A 1; in C 1, again, it was 0.45 m; as a rule, it was thickest in the north-western and northern squares (inside the door), but grew thinner towards S. and S.E., and petered out completely close to the wall, which does not form a right angle with the floor, but a slightly obtuse one.

The composition of the burial stratum was not quite homogeneous. In the greyish-brown gravel, there occurred here and there lenses and strata of an altogether different character: firstly, in squares A 3 and A 4, sharply defined, greenish accumulations of gravel, even at a depth of 0.1 m above the floor — clearly disintegrated rock pieces from earlier falls, and, secondly, in squares A 4, B 3, B 4, C 3, and C 4, at different heights above the floor, darker layers, 0.01 to 0.04 m thick, more or less distinctly mixed with soot and charcoal, and occasionally overlaid by a clayey stratum. In squares B 4, C 3, and C 4 purer charcoal was found, also in coherent bits, and also more or less burnt and calcined bones (with or without connection



with other traces of fire), which all indicated that fires had burnt in the chamber on sundry occasions during the time it was in use<sup>1</sup>.

In some places in the chamber (in C 1, C 3, and B 4) rough stones occurred at different depths in the burial stratum of the same kind as this used in the older door-packing, and clearly derived from the latter (p. 183), similarly there was obviously a close connection between this packing and the stones found in the deepest level, on the very floor, on the borderline between the squares A 3 and A 4 (fig. 146). From the varying depth it seems to be apparent that these stones found their way down into the chamber on different occasions and then become part of the burial stratum (p. 188).

Besides a large number of potsherds (L. H.) some of which could be made up into more or less complete vases, and numerous fragments of a kind of clay packing, to which I shall revert later, many other objects were found in the burial stratum and at different levels in it. When the falls of rock from the ceiling and walls occurred the objects on the surface were in some cases crushed by the debris, in others they merely became encased in fallen material and even — as is the case in Tombs 5 and 6 — were pushed up a few cm in the same.

The objects found in the tomb are described below, p. 407 ff.

Burial gifts occurred in all the squares of the chamber, but no particular groups, which might be assigned to certain definite burials, can be distinguished.<sup>2</sup> This was also the case with the remains of the skeletons (see p. 187).

The fragments of clay packing referred to above, which were found in 7 of the 12 squares of the chamber, and were especially numerous in squares B 2, C 1, and C 2, call for special mention. They consist of long or short, narrow strips of fired or unfired clay, triangular in cross-section, and show distinct traces of having been pressed against, i. e. tightened the joints between two planks or plaques placed at right angles to each other, and, as at least some of the pieces found in square B 2 indicate — of wood. As a rule, the fragments lay in no sort of order, but in some places (in squares B 2 and C 1) a certain system could nevertheless be observed. They lay, at certain short intervals, in rows which were partly parallel, and partly at right angles to each other. As, moreover, some of the fragments found in square B 2, bear the impressions of right-angled corners,<sup>3</sup> one may be justified in assuming that the wooden discs or plates had formed the sides and bottoms of wooden boxes or caskets, in which the joints had been tightened with clay. Compare with these the round or oblong wooden boxes of which remains have not infrequently been found in tombs from the early<sup>4</sup> and late Bronze Age, as well as from the early

<sup>1</sup> In Chamber-tombs 1 and 2, too, similar traces of fire were found (cf. pp. 160 and 167).

<sup>2</sup> This may hold good also for the groups of vases in squares A 1, C 2, and C 3.

<sup>3</sup> They lay, however, in no connection with each other.

<sup>4</sup> Roughly contemporaneous with the L. H. period.

Iron Age, in Scandinavia and northern Germany;<sup>1</sup> the sides were here formed by thin bent, wooden plaques or strips, and the joints were tightened not with clay but with a resinous substance (»harpix»). The distance between the parallel rows of clay fragments in square B 2 (a—d) was respectively 17.2 cm and 18.8 cm, and the corresponding figures in square C 1 (1—6 and a, b, d) were respectively 11.5 and 17.0 cm, which gives the area of the bottom surface, in the former case as  $17.2 \times 18.8$  cm and in the latter of  $11.5 \times 17.0$  cm. No clay fragment derived with certainty from the perpendicular joints has come to light,<sup>2</sup> nor could the height of the boxes be determined in any other way.

Apart from these two collections of packing fragments clearly defined accumulations of such occurred in four more places, all of them in square B 2 (fig. 146), though here the fragments lay without any noticeable order. Evidently, however, even these four collections indicate the places for as many caskets.

Nothing of the contents of the caskets has been preserved. They probably contained food, now decayed, possibly also in a semi-liquid form, e. g. honey, as the vases in the tomb had been intended for water, wine, and the like.

The burial stratum of the chamber contained plenty of bones, some very much decayed and fragile; most of those in a better state of preservation are inserted on the plan, fig. 146. No concentration to any particular level in the stratum could be noticed, for bones were found both on its surface and at different depths within it. They occurred in all the squares of the chamber, but were especially plentiful in the area inside the door, and here, particularly, in the squares B 4 and C 4. However, no undisturbed skeletons or parts of skeletons in order occurred anywhere, not even — as in Tomb 6 — any defined collection of bones, which might have been interpreted as a disturbed skeleton. Everything was in complete disorder. In this tomb, too, some of the bones seemed to have been purposely and intentionally pushed aside, to the wall of the chamber, probably to make room for later burials.

Any estimate of the number of persons which these bones represent, must, of course, be to a certain extent approximate. But a certain starting point for such an estimate is supplied by the number of skulls; fairly complete specimens, of facial and jaw portions, were 7 in number (A 2, one; A 4, one; B 3, one; B 4, two; and C 4, two). Besides these, however, other cranial resembles were also found which must have belonged to other skulls the included calotte portions and the like which did not correspond with the fairly complete specimens in other places (B 1, two; B 2, two; and B 4, three). In view of this one may assume with a far degree of safety that some ten persons were buried in this tomb.

Two of the skulls, in Square B 4, have been examined by Professor Fürst;<sup>3</sup> it

<sup>1</sup> Sophus Müller, *Ordning af Danmarks Oldsager, Bronzealderen*, Copenhagen 1891, figs. 42 and 43, and Oscar Almgren, in *Kungl. Vitterhets Historie och Antiquitets Akademiens Månadsblad* 1900, p. 112 ff.

<sup>2</sup> The fragment c in the square C 1 may, perhaps, be part of such a perpendicular packing that had dropped out.

<sup>3</sup> Fürst, *op. cit.*, p. 76 ff.

was found that one (Fürst, No. 29 F A) is brachycranial and female, and the other (Fürst, No. 28 F A) dolichocranial and probably that of an old woman approximately 70 years of age.

The question might be asked whether the disordered condition of the skeletal remains can have anything to do with the marked contrast already noted in the structure of the door-packing and the stratification of the dromos fill. Obviously, this contrast indicates that on some occasion access was gained to the tomb-chamber for some definite purpose by digging down into the upper, inner part of the dromos and then removing the upper part of the rubble packing of the door.<sup>1</sup> Then the door was closed again and the dromos filled in.<sup>2</sup> If this had been done for a fresh, or, in other words, final burial in the chamber, an orderly skeleton would have been found there. As a matter of fact no such skeleton was found. Possibly — as was the case in Tomb 6 — it was disturbed when the ceiling and walls fell in, but it is hardly likely that such a fall could have shifted the bones of a skeleton so completely as has happened here. May not, perhaps, the person last buried here, as in other similar cases, when an undisturbed skeleton has been lacking, have been a person whose bones have completely decayed? If so was it an infant? Or did grave-robbers force their way into the chamber? The latter would hardly have reclosed the door so very carefully, not to say piously, as has here been done. And, inside the chamber, they would have left more distinct traces of their activities than the disturbed bones can show. At any rate, the burial stratum was not thoroughly searched right through; strata containing charcoal have been found, as previously mentioned, in different places and levels in it, and these layers showed no signs of any disturbance; similarly, the clay packing lying *in situ* would have been thrown about in all directions, if the burial stratum had been disturbed by human agency at those points.

It is difficult to answer these questions satisfactorily. One would almost be tempted to believe that a burial had been planned, and that some of the skeletons from earlier burials which lay on top had been pushed aside on that account, but that the idea had been abandoned and the tomb closed again when this seemed, through the caving in of ceiling and walls which had already taken place or was threatening, no longer to offer a safe and undisturbed resting place for the dead.

Finally, it should be pointed out that this tomb is in some respects reminiscent of Chamber-tomb 2 (p. 170). Here, too, the door-packing belongs to two different periods, here, too, the older part seems to have been altered after a fresh burial, and here, too, the chamber seems to have stood open for some time before the door was finally closed, circumstances which in some degree may explain the disordered condition of the human remains.

<sup>1</sup> The stones fallen from this door-packing, inside the chamber lay at varying depths in the burial stratum. This seems to indicate that the chamber had been standing open for some time.

<sup>2</sup> Considerable use was made of the rubble for this purpose. Cf. the condition of that part of the dromos of Tomb 4, which exists between the two niches, where also a later digging down appears to have taken place (p. 175).





Fig. 147. Door-packing of Chamber-tomb 7.

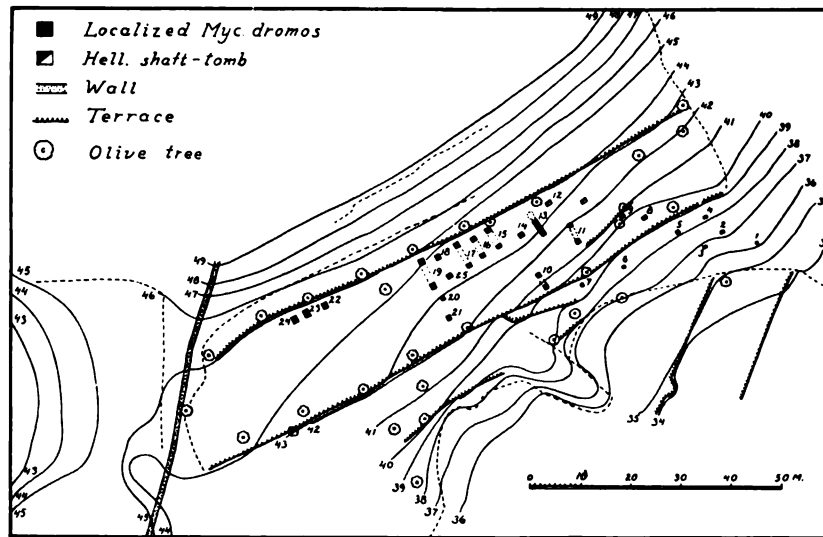


Fig. 148. Plan of the Mycenaean Necropolis II. Cf. fig. 1.

#### 4. MYCENAEAN NECROPOLIS II

This necropolis, too, was discovered by mere chance. During reconnaissances on the northern slope of Mt Barbouna, in the spring of 1926, a comparatively insignificant cavity in the ground was noticed, and an investigation of this soon went to show that here was a, partially collapsed, Mycenaean chamber-tomb (No. 9 on the map, fig. 148).

In view of this, a thorough examination of the surrounding area was set on foot, which resulted in the discovery of 24 chamber-tombs altogether (fig. 148).<sup>1</sup> Besides these between Tombs 9 and 12, a rubble-filled, rectangular excavation in the rock came to light, which in all probability indicates a Hellenistic shaft-tomb of the same kind as the three Hellenistic shaft-tombs in the Mycenaean necropolis I.

The necropolis lies as has already been stated on the northern slope of the hill. Its centre lies 200 m N.W. of the centre of the Mycenaean necropolis I (fig. 1). 60 m from the tomb farthest in the north-west of the last-mentioned necropolis one meets a stone wall running N.E.—S.W., belonging to the fortification system of Mt Barbouna (p. 147); and if one continues on the other side of this, another 17 m in the same direction, one reaches the eastern limit of the second necropolis, marked by Tomb 24.

The tomb-area measures 100 m in length oriented E.—W. and up to 20 m in breadth, and the greater part of it lies on deserted fallow land on which some trees are growing,

<sup>1</sup> There is a possibility that more tombs may exist, particularly in the eastern part of the area. — During these investigations some sherds were found, mostly of Mycenaean date, but also from other periods, e. g. a large Geometric pithos was recovered, lying almost on the surface of the ground, in the entrance to the dromos of Tomb 23.

and where once vine was grown.<sup>1</sup> Below, to the N., vineyards and olive groves lie in terraces. The slope of the ground is much less pronounced than in the Mycenaean necropolis I, on an average only 22 or 23 m : 100, and in the eastern part only 10 to 15 m : 100. This state of affairs caused the floor of the dromoi to be made with a much steeper slope inward towards the chamber, than is usually the case (cf. p. 155). The bedrock is of the same kind as that in the Mycenaean necropolis I, perhaps even softer than there. Immediately W. of the tomb-area, however, is the hard, grey limestone.

Only one tomb has been excavated (fig. 149), namely that, on fig. 148 numbered 13, situated in the central part of the area.<sup>2</sup>

The dromos, which is oriented N.—S., with the opening to the N., measures 3.4 m in length and 1.2 m in breadth. The walls are almost perpendicular. The height inside, near the door, is 1.9 m, measured from the surface of the rock. This measurement, which must be looked upon as a minimum possible for cutting a door and a chamber inside it, was only obtained, because of the faint slope of the ground, by lowering the level of the dromos floor a good deal. From an upper level scarcely 0.8 m long and sloping faintly inwards, two steps — the upper one 0.4 m wide and high, the lower one 0.3 m wide and high — lead down to the bottom level, which is horizontal for the greater part of its length 1.8 m, but at the very end again slopes down towards the door. The difference in level between the outer and inner parts of the dromos becomes in this way 1.3 m.<sup>3</sup>

The doorway is 0.65 m wide at the bottom and 0.5 m deep. The western door-jamb is 0.15 m narrower than the eastern one, which gives the door an oblique frontage towards the dromos. The upper part is missing; the eastern jamb reaches a height of only 0.5 m and the western one 0.6 m above the floor, which slopes in towards the chamber. Up to this height it was completely filled with rubble packing composed of large and small stones; from the upper part now destroyed came the fallen stones found on the outside. The rubble packing rested on a 10 cm thick layer of limestone gravel.

The chamber, whose dimensions near the floor are  $1.2 \times 1.7$  m, seems originally to have been intended to have a regular, oval form and a symmetrical position in relation to the door and dromos. To the N.W., however, the cutting was for some reason left unfinished. The height is 1.6 m. The central portion of the outer part is missing (see below).

Below the surface layer of humus, the dromos fill consisted of a homogeneous mixture of gravel and pebble. The bottom was covered by a layer of fine grey limestone gravel up to 10 cm thick, which in the dromos proper — on the steps and the bottom level — had been very hard through ramming or some such process, but

<sup>1</sup> In several places were found pits for the vines, dug out in the rock.

<sup>2</sup> It was first intended to excavate Tomb 11, but this soon proved to have partially caved in.

<sup>3</sup> Such an arrangement was probably only noticed formerly in sporadic instances on the Greek mainland. Cf. Wace, *Chamber Tombs*, pp. 125 and 143.

farthest in — in front of and below the rubble packing of the door — had a looser consistency.

No finds were made in either the dromos or the doorway.

The upper part of the chamber was filled with an up to 0.6 m thick layer of rain-born soil and sand, below which came a similar layer, 0.5 to 0.6 m thick, whose distinct stratification indicated that that too had gradually been washed from the outside into the chamber. In this layer was found debris from the ceiling and front part

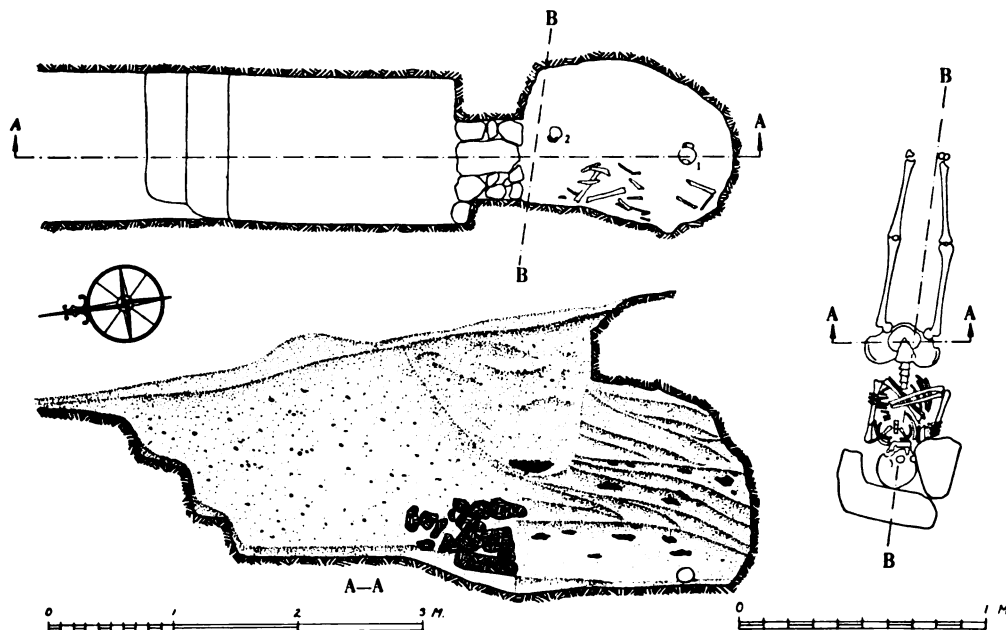


Fig. 149. Plans and section of Chamber-tomb II: 1.

of the chamber, the middle of which — as has been stated — was missing. Still more of this was found below the second stratum as a compact layer of stones and fallen rock, near the door 0.5 m thick, but somewhat thinner towards the interior of the chamber.

It was not until we got below this that the burial stratum proper was found, consisting of fine limestone gravel, inside the door-packing 0.15 m thick and with a greater admixture of soil, farther inside the chamber thinner and purer. In this layer were found two vases (see p. 421) and several human bones, very severely damaged by the debris and so disturbed from their position that no distinct order could be noted. But they clearly belong to one single corpse placed in the western part of the chamber.

However, at some later period the tomb had to receive another corpse. In the upper, outer part of the chamber a skeleton was found at a height of 1 m above the floor (fig. 149) lying on its back in an extended position, with the head towards the



W.N.W., the feet towards the E.S.E.,<sup>1</sup> the arms crossed over the chest; two stones being placed at the head. Near the waist was found an almost round iron belt buckle the corpse had obviously worn a belt about its waist.

This burial must thus be dated to any post-Mycenaean times. From the investigation it was ascertained (fig. 149) that on some occasion — but not until after the upper parts of the door and door-packing had fallen in, the outer part of the chamber had caved in and its interior had been filled with washed-in soil and sand — somebody had dug down through the loose layers, placed the corpse on the bottom of the pit thus made, and then filled it in again.

In comparison with the chamber-tombs in the Mycenaean necropolis I this tomb, both in size, and still more in its contents, is of a strikingly poor character. It gives to a certain degree the impression of a pauper's tomb. But to draw any general conclusions from this for the whole necropolis, would, of course, be far too hasty, as long as no other tombs there have been examined, a thing, however, which circumstances did not permit.

## 5. THE GEOMETRIC NECROPOLIS

Already at the very beginning of the 1922 spring campaign it was noticed that Geometric sherds were plentiful on the southern and south-eastern slope of Mt Barbouna, above the road that runs along there. The slope is rather steep, but is interrupted by cultivation terraces supported by low stone walls. A closer investigation soon proved the existence at this point of a necropolis from the Geometric period, obviously a fairly extensive one, with its centre roughly 100 m N.W. of the expedition's store-house (fig. 1). Here and there rain-water had exposed the more superficial contents of the tombs, chiefly pottery fragments.<sup>2</sup>

Other, more important tasks, however, have not permitted any thorough investigation, either of the extent of the necropolis or of its tombs, which are clearly both numerous and rich in finds. Apart from some trials, made during the said campaign and the autumn campaign in the same year, only one tomb was completely excavated.

This is situated on the slope, just below a terrace wall, 65 m W.N.W. of the store-house and 15 m from the road, at a height of 7 m above the latter (figs. 40, 150).

Below a layer of washed-down soil, gravel, and stones, part of which is quite certainly of recent date, and is occasionally mixed with potsherds, a cauldron-shaped pit was laid bare, with a diameter of 2 to 2.2 m and a depth of up to 0.8 m, cut in the rock, which is here a soft shale. Some 20 cm below the edge of the pit was found an extensive tomb deposit some 20—30 cm thick. In this, mostly in its northern

<sup>1</sup> The foot bones were lost before the skeleton had been noticed by the workmen; they have, therefore, not been inserted on the plan.

<sup>2</sup> This is obviously the necropolis mentioned in Tiryns I (Athen 1912), pp. 138 and 148.

part, close to and between some large stones lay about 20 vases, some of which had clearly been purposely smashed at the time of burial; others were still whole, but all lay jambled together, without any noticeable order. In the southern part of the burial deposit a layer of ashes was observed, 1 m wide and 0.1 m thick, clearly defined

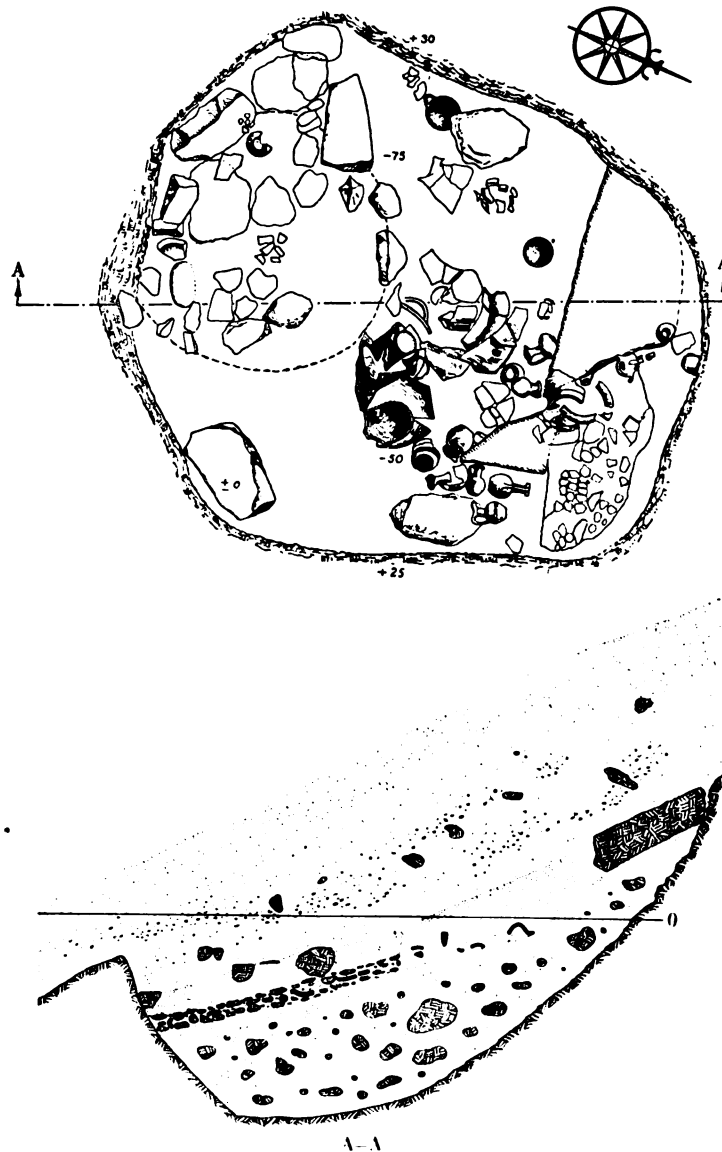


Fig. 150. Geometric tomb on the south slope of Mt Barbouna. (Scale 1:30).

and partly surrounded by stones; in this occurred some pottery fragments, as well as a bronze pin.

In the same burial deposit also appeared a small flake of obsidian and a couple of unburnt pieces of bone, a scorched one, and a couple of possibly burnt fragments,

but all of them far too insignificant for it to be decided whether they had belonged to human beings or animals. The layer of ashes rested on a bed of stone chips and sherds of coarse pottery. Below this, and similarly below the rest of the deposit, there commenced an approximately 0.5 m thick layer of sand and soil with an admixture of large and small stones which had clearly been intended to fill the rounded bottom of the burial pit, so as to make an even surface for the burial deposit. In this filling, too, plenty of sherds occurred, but these obviously had no connection with the burial and originated from the surrounding area.

Concerning the burial customs here used some hesitation may be felt. Of course, the layer of ashes need by no means suggest that the corpse has been cremated — it is also possible to think of sacrifices or some other ritual — but, on the other hand, some palpable traces of a skeleton should have been found, if the corpse was buried uncremated; the minute, unburnt bone fragments show that such have actually been preserved in good condition, and it should be noted that the skeleton in the adjacent Hellenistic tomb (p. 197) was quite well preserved. It is probable, therefore, that the corpse was cremated. But in the burial pit itself no traces of any considerable fire could be noticed; it must, consequently, be assumed that the cremation took place elsewhere and the ashes were afterwards deposited in the tomb; the complete — or practically complete — absence of burnt bones is nevertheless remarkable.

Concerning a somewhat doubtful Geometric burial in the Mycenaean necropolis, see p. 152.

## HELLENISTIC TOMBS

As has previously been mentioned (p. 151) three tombs from the Hellenistic period were found during the trial excavation of the Mycenaean necropolis I in the spring of 1924. They are all situated towards the northern edge of the necropolis.

### SHAFT - TOMB 1 (fig. 151).

Situated 20 m N.W. of the mouth of the northern dromos of the Mycenaean Chambertomb 1.

In the rock, which slopes to the N.E., a rectangular shaft has been cut measuring  $1.1 \times 2.3$  m, oriented N.E. to S.W. The bottom which slopes slightly to the N.E., is to the S.W. 0.6 m below the surface of the rock, to the N.E. on a level with it. In the middle of this shaft, a smaller one has been cut, also rectangular,  $0.5 \times 1.9$  m, with its bottom 0.5 m to the N.E., 0.6 m to the S.W. below the bottom of the upper shaft. This second shaft was covered by four approximately rectangular ashlar blocks which rested on the long-sides of the first shaft bottom.



The filling in the upper shaft was composed of grey limestone gravel with some odd pieces of pebble of the same kind as the surrounding ground. Below the covering ashlar blocks was an empty space for some or less 0.1 m (to the S.W.). Below it came a layer 0.05 m thick, of the same grey gravel, obviously washed down by the rain-water,

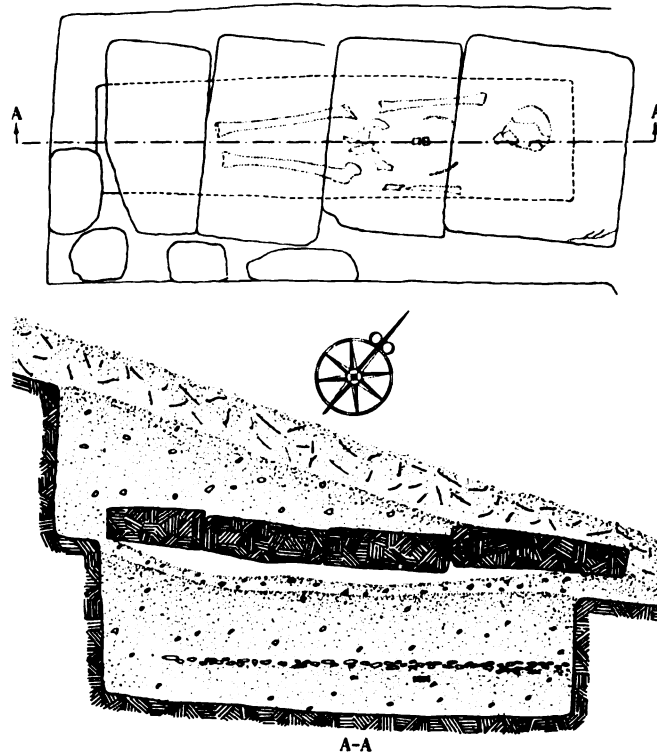


Fig. 151. Hellenistic tomb 1 in the Mycenaean Necropolis I. (Scale 1:30).

and below that a fine, light-brown sand with pieces of pebble, which continued right down to the bottom of the shaft.

In this sand was found, apart from some obviously adventitious L. H. potsherds a much decomposed human skeleton, lying on its back in an out-stretched position, with the head to the N.E. The height above the bottom of the shaft was 0.15 to 0.20 m. Immediately above the skeleton came an irregular layer of stone chips of varying thickness. In the mouth of the skeleton was found a very much corroded small silver coin.<sup>1</sup>

#### SHAFT - TOMB 2 (fig. 152).

Situated 12 m N.N.W. of the preceding one and of the same type.

The upper rectangular shaft measures  $1.2 \times 2.8$  m, with its long axis N.E.—S.W. The rock slopes less at this point; on the other hand, the shaft bottom has been given

<sup>1</sup> As to the coins found in this tomb, see Persson's forthcoming paper on the coins.

a greater slope towards the N.E., so that its depth to the S.W. is 0.4 m, to the N.E. 0.6 m, below the surface of the rock. The bottom of the lower, also rectangular, shaft is 0.6 m in the S.W., 0.4 m in the N.E., below the bottom of the upper shaft. It was covered by two rectangular ashlar blocks, the south-western measuring  $1.0 \times 0.70 \times 0.25$  m, the north-eastern  $1.05 \times 0.75 \times 0.25$  m, and to the N.E. by some smaller stones.

The fill of the upper shaft here consisted of grey gravel, which was also found again as a 0.15 m thick, upper layer in the lower shaft. Below it, and extending right to the bottom, the fill consisted of reddish-brown gravel, with a few isolated stones.



Fig. 152. Hellenistic tomb 2 in the Mycenaean Necropolis I.

Here, too, there was an empty space below the covering blocks, which, towards the south-west end of the shaft, reached a height of 0.3 m.

In the upper layer of this fill were found a few L. H. potsherds, some traces of a skeleton, and an indeterminable bronze fragment, the first at least having obviously no connection with the tomb.

### SHAFT - TOMB 3

Situated N. of, and very close to, the preceding; of the same type. This tomb was not investigated.

In the Mycenaean necropolis II also, there is in all probability a tomb of this kind (p. 189). This has not been investigated.

\* \* \*

During the 1922 spring campaign a Hellenistic tomb of quite a different type had been found at the foot of Mt Barbouna, to the S.E., below the Geometric necropolis there and the road. This is situated 10 m W. of the south-west corner of the expedition's store-house (fig. 40), only a few metres above the shore (4 m above sea level).

It is a cist tomb (fig. 153), 1.7 m long and 0.4 to 0.5 m broad, oriented N.—S., or perhaps rather a combination of cist- and shaft-tomb in that the western long side

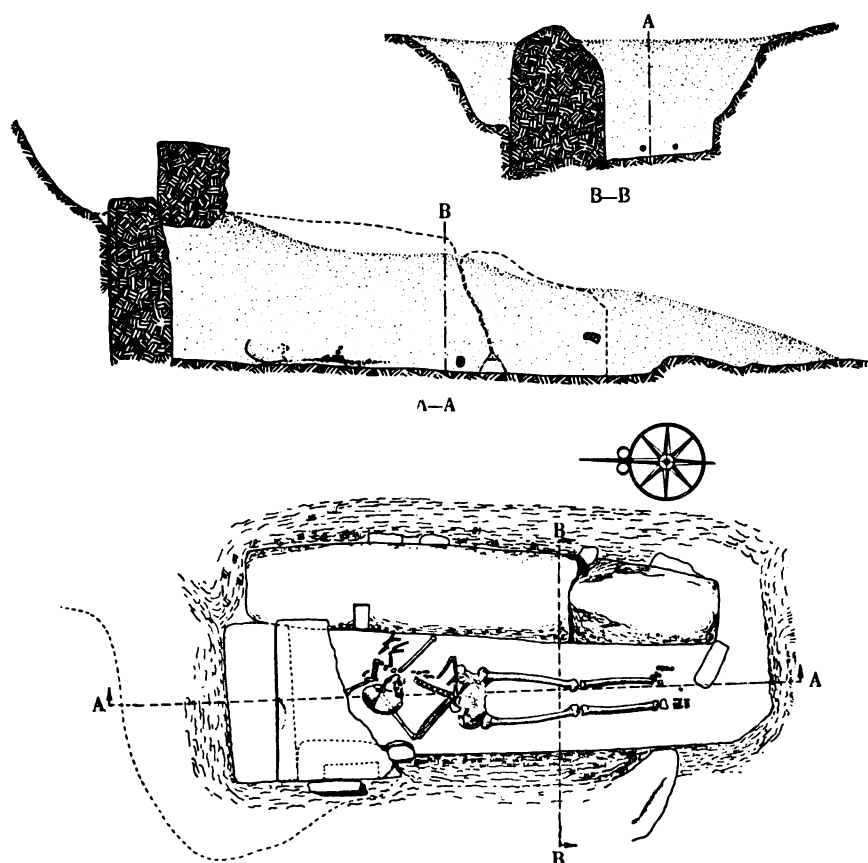


Fig. 153. Hellenistic tomb about 10 m west of the expedition's store-house. (Scale 1:30).

is cut in the rock, while the eastern one is formed by a stone placed on edge 1.9 m long and 0.30 to 0.35 m thick,<sup>1</sup> now broken into two pieces. The northern end is also formed by a similar stone, 0.65 m broad and 0.25 m thick. The southern end stone is missing, as is also most of the covering; only at the N. end part of an ashlar covering-slab is still left, 0.65 m wide and 0.35 m thick.<sup>2</sup> The bottom of the tomb, which is formed by the bed rock and which slopes gently towards the S. is 0.5 m below the under-

<sup>1</sup> On the rounded, upper side of the larger piece can be seen a rectangular hole, a few cm deep (fig. 153).

<sup>2</sup> On this western side is a rectangular hole (fig. 153). The material of this block, and of the lateral and endblocks is of the same soft, stratified, granular limestone, which was used in the central part of the northern wall of the Lower Town, and in other Roman structures at Asine (p. 31).



side of the ashlar covering-slab. The fill consisted of, first a layer of soil and stones 0.2 m deep, which had been disturbed and, clearly, searched. Below this came a very hard layer of gravel and sand mixed with chips of shale, which had clearly, perhaps during the rains, slipped or been washed down from the rock to the W., which is composed of soft shale, and gradually been cemented together into a solid mass.

Below this layer was found a human skeleton, lying on its back on the bottom of the tomb, with the head to the N. The lower part lay stretched out straight, the upper, on the other hand, bent almost at right angle, the skull resting on the right upper arm. The bones of the upper part were also found in a position, which may indicate that the corpse was buried in a sitting position.

Near the lower cervical vertebrae was found a small Argive silver coin<sup>1</sup> on the chest some small fragments of an iron pin, an around the left foot 10 iron nails with stout heads, all, except one, with their points upwards<sup>2</sup>. Just S. of these lay a 0.2 m long grindstone with its concave surface downwards.

<sup>1</sup> See Persson's forthcoming paper on the coins.

<sup>2</sup> Possibly mounting of an artificial foot; the bones of the left foot were missing.

# THE FINDS

BY AXEL W. PERSSON

## INTRODUCTORY NOTES

The excavations at Asine produced enormous quantities of potsherds — at a rough estimate between 2 and 3 millions of them. Contrary to the usual practice in other excavations, all the potsherds have been preserved, except those from one section where the layers were clearly very much disturbed, so that the potsherds could not have the slightest stratigraphical value.

The different sized sectors of the area under excavation were as a rule divided into sectors 2 m square, and these were excavated in layers of 10 or 20 cm. When house foundations were found this division was abandoned and the natural one was followed, the walls of houses becoming determinative factors, but within these limits the original division into squares was as far as possible adhered to. Such information is supplied by the leader of each section in the note-book kept by him, which also contains observations made in connection with the collection of the material. All the potsherds were collected in wooden cases, to which a wooden label was fastened with a detailed statement as to their provenance. The contents of the wooden cases were then sent to the wash — throughout the excavation two or more girls were constantly employed on this task. It was not until they had been washed that the potsherds were taken to the store-house, where one of the expedition's scientifically trained assistants was constantly at work making a first examination and classification of the material. A copy of the wooden label was made on paper, and a summary classification was made, after which the contents together with the original label were packed in cardboard boxes, on one end of which the provenance was marked, and possibly a statement as to the number of cardboard boxes belonging to one and the same batch. The final cleaning, putting together of sherds belonging to the same vessel, etc., and the more detailed study of the material could, however, thanks to the extreme kindness of the Greek authorities, be carried out in Sweden, in so far as the bulk of the finds was concerned. The entire sherd material from 1922 was taken to Lund for three years and there dealt with under the superintendence and guidance of the undersigned in the extensive cellars of the University there.

Similarly the material from the 1926 excavations was taken to Uppsala, where ideal premises for work were kindly placed at the expedition's disposal in the Castle, where the vast Throne Room, before its restoration, made it possible to make a survey of the greater part of the material simultaneously. The cardboard boxes were arranged in accordance with their labels or marks, so that the material could undergo the final cleaning process in stratigraphical order, just as it had lain in the earth. The potsherds were given a weak acid bath, after which they were rinsed and laid out to dry on tables erected for the purpose. After this the making up of the vases could be begun, and in this Messrs. F. Jönsson and H. Gelin proved themselves extremely clever vase-menders. At the same time the notes on the labels written at Asine were augmented, and information about the made-up or mended vases was also entered on the labels. After the material laid out in this manner had all been dealt with, the remaining sherds were once more packed in their respective cardboard boxes, and are, consequently, still available for checking. After the entire material had thus been thoroughly dealt with, some of the most interesting pieces were once more examined. The material from the 1924 campaign, which was mainly devoted to the investigation of Mycenaean chamber-tombs, although besides these a section 12 m square in the Lower Town was excavated to a depth of about 2 m, was dealt with at Nauplia in the summer of 1925 for over 2 months, when the writer, with the aid of Mr. N. Valmin, now a lecturer, and Mr. Neander Nilsson, M. A. and Mr. N. Grimanis as assistant vase-mender, dealt with it in the same way.

After the treatment thus given to the material anything of importance can hardly have escaped our notice. Of course, it may be possible, by further labour and expense to recover a vase or two from the remaining material, but this calls for a great deal of time, so that the result may be said to be scarcely commensurate with the sacrifice. The results already gained, about 800 whole vases, are as much as may reasonably be expected.

## S e t t l e m e n t

### E A R L Y H E L L A D I C

### P O T T E R Y

Deposit from Early Helladic times occurs over practically the whole area of excavation. On the acropolis deposit from this period was excavated on the two terraces which have been named »Polygonal Wall Terrace» and »pre-Mycenaean Terrace». On the »Polygonal Wall Terrace», at its eastern side, were also found vast accumulations of E. H. I and II potsherds, no doubt the result of some clearance and rearrangement of the area in the neighbourhood, where the foundation walls



and floors of a rectangular E. H. III house have been laid bare. Another accumulation was met with close to the fortress wall of the acropolis, to the right of the main entrance, especially below the inner tower. They had obviously been dumped here in order to fill in the unevennesses in the ground and to make a level surface inside the wall constructed during the Hellenistic period. Here an inverted sequence of strata could be clearly observed, with the E. H. I potsherds on the top and E. H. III potsherds at the bottom. This inverted sequence at this point can be explained as a result of the importation of filling material from elsewhere, in which process the originally upper, later layers or strata had been covered by lower and earlier ones.

E. H. deposit is met with practically everywhere in the Lower Town. To the extreme S., nearest the acropolis, they appear practically on the surface, on Terrace II and in most other places covered only by M. H. layers, but in the Lower Town proper they lie below thick layers belonging to Hellenistic, Geometric, Mycenaean, and M. H. epochs. To the extreme N., close to the wall surrounding the Lower Town, they are not found in the deepest layers — no neolithic deposit has been found at Asine.

The normal stratigraphical sequence can be studied at various points in the excavations, as deep excavations have been made in a few places merely for the purpose of studying the pottery. Thus already in the autumn of 1922 a trench

*Proportions of different wares found in the lower layers of the lime-kiln.*

	330—350		350—370		370—390		390—410	
Matt-painted ware.....	0006							
Red Polished .....	0020	0.5 %						
Grey Minyan .....	0175	4.2 %	0001					
Black Minyan .....	0014		0005					
Black Polished .....	0010		0017					
Faience ware .....	0020	0.5 %	0007		0002			
Patterned or partly glazed ware	0035	0.8 %	0024	1 %	0005			
Glazed ware { black .....	0688	} 23.3 %	0546	} 32.6 %	0207	} 30 %	0006	} 8.5 %
{ red .....	0501		0327		0215		0014	
Monochrome buff or grey.....	0231	5.5 %	0142	5.3 %				
Monochrome yellow .....	1793	42.7 %	1238	46.3 %	0380	27 %		
Monochrome brick-red .....			0034	1.3 %	0479	34 %	0201	85 %
Coarse ware .....	0704	17 %	0334	12.5 %	0127	9 %	0014	6 %
Total number of sherds .....	4197		2675		1415		235	

was cut down to bedrock in the north-eastern corner of the Lower Town, in the lime-kiln. In the spring of 1930 another, similar control trench was dug in the north-western corner of the Lower Town, in Square G 14, from a Late Mycenaean level which was reached at this point during the 1926 excavations. The results of these two deep excavations are perfectly similar, and in complete agreement with the observations made elsewhere in the excavation area. Both the trenches here referred to, however, were comparatively narrow and small, 2 metres square, for which reason no very large number of whole vessels have been recovered. The potsherd material, on the other hand, was extremely plentiful — altogether more than 12 000 sherds — and this gives a clear and sufficient illustration of the development of culture at Asine.

The deep excavations of 1930 were extremely significant and of great importance for the division into periods, because then we had the good fortune to come across strata clearly separated from each other by burnt layers and floors. At a depth of 260—270 cm below the Late Mycenaean level the transition from M. H. to E. H. is marked by a thick burnt layer — at most places 15—20 cm deep — above a floor of large cobble-stones, with a hole for a post which supported the roof of the latest E. H. III building, the one destroyed by the fire. At a depth of 320—330 cm follows a fresh burnt layer, immediately above a limestone floor extending right across the trench, and belonging to the latest building from E. H. II. Below this comes a magnificent oval wall (Wall 1) belonging to the same period, and lower still, at a depth of 400 cm below the Late Mycenaean level, the earliest E. H. I deposit commences and extends for 70 cm down to the rock. The observations that could be made on these layers of deposit the dividing lines between which are clear and fixed, are, of course, more reliable than those that can be made by the study of more or less reliable accumulations in bothroi — this is shown *inter alia* by the many bothroi we have had an opportunity of investigating at Asine.<sup>1</sup>

All E. H. pottery found at Asine is undoubtedly hand-made, i. e. not made with the aid of the potter's wheel. Use is made in the ensuing pages of the categories of Polished Ware, Glazed Ware, Patterned Ware, and Unpainted Ware, distinguished by Blegen and Wace. In consideration of the full characterization and illustration of these categories given by Blegen in his fundamental works *Korakou* and *Zygouries*, I may, I think, be allowed to be brief in my descriptions. While I shall continue the attempted division of the period into beginning, middle, and end made already in my *Rapport préliminaire*, which has since been taken up by Miss Goldman, I shall, nevertheless, deal with these categories on a stratigraphical basis, and depart in this respect from Blegen's classification.

<sup>1</sup> It seems to me that Miss Goldman in her publication on the excavations at Eutresis has unfortunately allowed herself to draw too far-reaching, and in some instances surely incorrect, conclusions with regard to the E. H. period merely on the basis of finds made in bothroi, in the absence of clear divisions between the layers.

## EARLY HELLADIC I

Polished Ware and Unpainted Ware together constitute more than 85 % of the whole quantity of potsherds from the lowest stratum. Both kinds of ware have precisely the same coarse-grained consistency, often grey in the middle but always brick-red, on the surface, evidence of firing at a relatively low temperature. As a result of the coarse texture and the poor firing, the biscuit easily crumbles away when rubbed. This circumstance often makes it very difficult to decide with certainty whether the surface has been polished or not, which might entitle us to amalgamate Blegen's two categories, more especially as we have obviously to do with the same forms of vases. Consequently, the pottery itself must determine its own category. In some cases a thin slip, always red, can be seen.

A relatively large number of sherds have simple, linear patterns, mostly simple groups of lines, incised without any very great care before firing (cf. Blegen, *Zygouries*, Colour-Plate IV). Ware decorated in this way is especially plentiful in the W. (cf. chiefly N. Valmin's and E. Holmberg's excavations at Malthi and Asea). White filling in the lines is as uncommon in the E. H. pottery at Asine as it is elsewhere on the mainland.

As regards the vase-shapes only fairly small vases of this ware are met with, at Asine chiefly low, open, almost saucer-like cups of a type that persists during the whole E. H. period. Taller cups do occur, and we succeeded in reconstructing one of the larger ones from sherds found in the accumulation close to the fortification wall, to the right of the entrance. The consistency of the ware and its technique show that this cup has to be included in E. H. I. To the same period, but to its latter part, probably also belongs a bottle found in the lime-kiln in stratum 370—390. These two vases are the only ones that could be reconstructed from the sherd material.

1. Bowl (fig. 154: 1). H. 0.09 m, d. 0.125 m. Spherical body with wide, contracted and offset rim; flattened at the bottom. This probably had a small loop handle attached where the edge is missing, and some distance down the body where a break has been filled in — a certain unevenness and bulging in the material just below the filled-in portion seem to show this. Yellowish-red clay; polished ware (Blegen, *Polished Ware II*). The shape is not in itself so very remarkable, but it becomes so, when we consider that it seems afterwards to disappear from the repertory of the E. H. period, where bowls and cups with offset rims do not occur except in very rare cases towards the end of the period. Only in Asia Minor have I been able to find a completely analogous and contemporary counterpart; an outline drawing is here given of a vase from Alishar-Hüyük, with the outline of the Asine vase drawn in (fig. 154: 2). Stratum I in Alishar-Hüyük is dated in round figures at 3 500 to 2 500 B. C., and is characterized by an apparently indigenous Anatolian plain, hand-made, red-slipped pottery.<sup>1</sup>

<sup>1</sup> Cf. University of Chicago, Oriental Institute Publications Vol. XIX, Erich F. Schmidt, *The Alishar-Hüyük, Seasons of 1928 and 1929*, p. 41 ff, especially fig. 53.



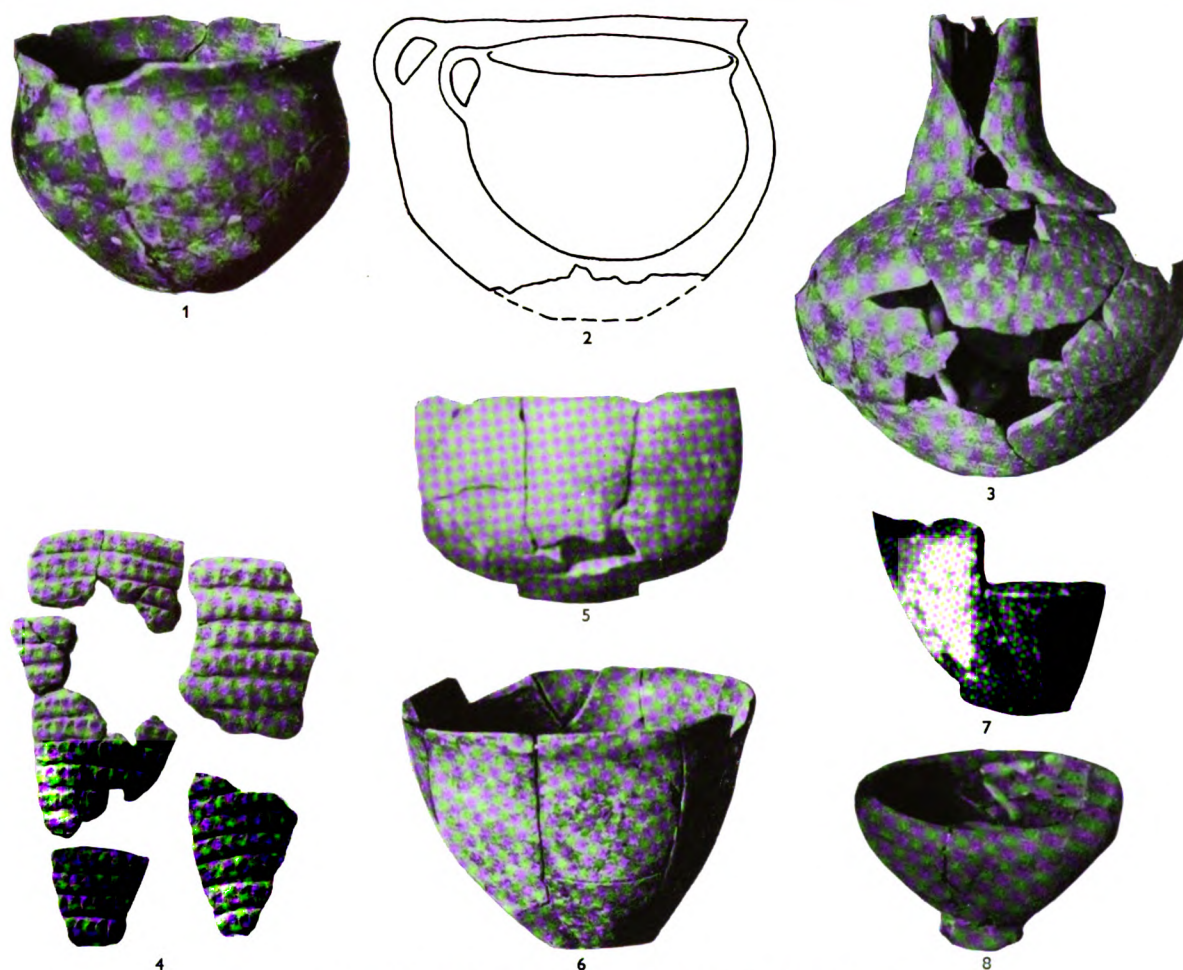


Fig. 154. E. H. I (1—4) and E. H. II (5—8) pottery.

»Many vessels, particularly those with red slip, were highly polished.» I leave the further discussion to the concluding chapter, where a synopsis of the whole varying material is given.

2. Bottle (fig. 154: 3). H. 0.165 m, d. 0.155 m. Flattened, globular body with raised narrow neck, which rises in an even curve from the shoulder and terminates abruptly in a sharp upright edge. Unfortunately, the one preserved will not admit of our saying definitely whether any handles existed or not. The ware is yellower in colour and better fired than the bowl just described. The surface is coated with a thin, red slip, highly polished. The slip has come off in small flakes here and there on the vase (Blegen, *Polished Ware II*). The shape, as far as I am aware, has not previously been found in E. H. pottery and differs considerably from the characteristic beaked jug. This vase, too, finds its nearest parallels in Asia Minor, where the type with abruptly cut-off neck is characteristic of the oldest jugs in Troy, cf. Hubert Schmidt, in Dörpfeld, *Troja und Ilion I*, pp. 250 and 259 f., fig. 114 and Beil. 35, I.

In the trench in the north-western corner of the Lower Town were found, just above the rock, pieces of a large, coarse vase, some of which can be joined together (fig. 154: 4). It is preserved to a height of 0.26 m. The surface of the vase was covered by raised horizontal bands which bear overlapping impressions of a thumb or of a blunt instrument. Similar decoration, more sparsely used, is often seen on larger vessels, and is there obviously intended to give the effect of the twisted strands of a rope. That can hardly be the case here, but it seems as if it had been intended to imitate some object in plaited grass or basket work. The clay is coarse and grey at the core, terracotta red at the surface, and contains small particles of silver mica. To judge by the curve of the part preserved and the arrangement of the horizontal bands, it must have been a huge jar or bowl, with straight walls, of a type common throughout the whole E. H. period.

A fragment which is very much like the one here referred to is published by Blegen, *Zygouries*, p. 75 f., Colour-Plate IV, No. 1. The decoration is the same except that there the horizontal bands are marked by short parallel dashes, a simplification of the overlapping impressions of the Asine sherd. Both the clay and the shape appear to be the same. Blegen is of the opinion that the Zygouries sherd came from an imported vase, because of the kind of clay. The material in the Asine sherd also differs from the normal, but I am very much inclined to interpret the difference as the result of an intentional admixture of mica in the manufacture of coarser vessels in order to make them fire better. Of the potsherds of coarse ware met with in the lowest stratum in the lime-kiln, about 6 % are of the same kind and entitle us to draw this conclusion.

Among the mass of potsherds of Polished and Unpainted Ware were found a few, about 8½ % in the lime-kiln, pieces of Glazed Ware, «Urfirnis», of which 2½ % was black- and 6 % red-glazed, at the uppermost part of the layer. The stratum is therefore not perfectly pure, but I would like to believe that they were intrusive from the layers above, and I am, therefore, still inclined to connect the beginning of E. H. II with the beginning of the occurrence of glazed ware. Cf. *Rapport préliminaire*, p. 60.

The characteristic pottery for E. H. I at Asine is Polished Ware, with or without slip, to which has to be added Unpainted and Coarse Ware. The vase-shapes that can be proved are few, and, as a rule, of small proportions; most common is a shallow bowl, but a high cup also occurs, with straight, or incurving rim. A jug with an abruptly cut-off straight rim belongs also to the repertory of vases, and also a huge jar or bowl. In every instance the base is formed merely by flattening the bottom. Incised patterns with parallel lines and plastic bands with overlapping impressions or incised lines constitute the only decoration.

## EARLY HELLADIC II.

Polished ware and unpainted ware of E. H. I type still occur, forming at first a large percentage of the total finds about 61 % in the lime-kiln, and still show the same forms. However, a great advance has been made in technique, and the monochrome yellow ware soon takes the place of monochrome brick-red, which gradually disappears altogether (see Diagram p. 201). Polished ware with red slip — thin or thick — is met with in a multitude of shapes. In some instances this slip is deep red and meticulously polished, in quality approaching that which is found in the Cyclades. For the general character of the ware, compare Blegen, *Zygouries*, p. 77 and Colour-Plate V.

The choice, but rarely found, variant of polished ware which I term Faience-ware, now makes its appearance, even if it does not become common until the next period. It is made of finely levigated clay and fired so hard that on breaking it has the same sound as real china. As a rule, it is grey in the centre but also brownish, and even almost black ware can be met with. The surface of the whole vase was coated with a remarkably fine slip, whose natural colour after firing was obviously yellow. In the case of a few sherds of an uncommonly large vessel in this technique it has been clearly proved that the slip melted on firing by the tiny bubbles which had come up in it near the upper edge and on a few applied ornamental bands, where the polishing could not be so effectively produced (cf. fig. 157). But through different firing processes it became possible to obtain a richly varying colour scale, often on the same vessel, from orange yellow and yellowish-white to grey, blue, and red, with all varying transitions (cf. *Zygouries*, p. 79; *Eutresis*, p. 97). The only shape in this ware that could be proved with any certainty is a small bowl. Bowl (fig. 154: 5). H. 0.07 m, d. 0.12 m. The body has a somewhat rounded bottom and slightly curved sides; the base is formed by flattening the bottom. The straight sides, like the flattened bottom, are a criterion of relatively early date, cf. below.

Glazed ware, or »Urfirnis», is both in technique and vase-shapes the most conspicuous and characteristic ware of E. H., but it is not until during E. H. II that it sets its seal upon the period. E. H. I is a preliminary stage when some vase-shapes are developed, but decorated in another way. Glaze-paint is largely a substitute for slip, though it does not oust it altogether. The more convenient method of production with glaze-paint, which produced the same effect as the laborious slip-treatment explains the latter's sudden fall from popularity after glaze-paint had once become known. It may be said that, in round figures, one-third of all E. H. ware afterwards was glazed ware. I have already in my *Rapport préliminaire* expressed the opinion that glaze-paint was not a native Helladic invention, but was taken over from Crete, and I shall revert to this in connection with the complete synopsis. That glaze is to be understood as a more convenient substitute for slip, seems to me also obvious from the circumstance that older glazed ware is completely coated with paint, and the variant where the decoration is confined to certain parts of the vase or to patterns



is not met with until somewhat later. To this must be added the fact that at Asine, as at Zygouries, examples are to be found where the outside was slipped and carefully polished while the inside was covered with glaze-paint.

We can, as has already been pointed out in the Rapport préliminaire, p. 70, on the glaze-paint, discern a certain development, now further confirmed by Blegen, Zygouries, p. 100. In the earliest period, in their delight in this new method of decoration as a substitute for slip, the potters used it to excess. It was enough for the whole vessel to be covered with paint, an endeavour was also made to give it a thick outer coating, so thick that it frequently shows a tendency to crack, but it has a «lustre» which nevertheless permits us to distinguish it easily from slip. Gradually the paint becomes more liquid, and often so thin that all the qualities and characteristics of the ware shine through, but retaining a good deal of gloss or brilliancy; during E. H. III, more particularly on the patterned ware to which it had been applied in a thicker coat, it occasionally loses its gloss altogether. It seems from the stratigraphy as if the red paint to start with, was more common at first but the black also occurs — in reality it is the same colour, and shade depends upon the degree of firing — and then ensues a certain balance between the two which towards the end of the E. H. period is displaced in favour of the black. Not infrequently different shades occur on the same vase, produced in the firing.

As examples of E. H. II glazed ware from Asine the following bowls may be cited:

1. Bowl (fig. 154: 6). H. 0.07 m, d. 0.10 m. Inverted conical shape with out-curving sides, tapering from plain straight lip to narrow flat base. Red clay covered with thick glaze-paint which is fired black.

2. Bowl (fig. 154: 7). H. 0.065 m. Shape and paint as last. The fragment shows that the walls of these small bowls are very thick towards the bottom, and grow thinner towards the plain lip.

I have not been able to find examples of this shape from E. H. III at Asine, and this agrees with certain observations of Miss Goldman's at Eutresis, that «the straight or only slightly incurving profiles are early». In Crete, we meet the same type, which exists in E. M. I in a coarse form, is refined in E. M. II and lives on throughout the whole Minoan period, later provided with a loop handle, in which form it is again borrowed by the mainland during M. H. II.

Alongside this type also occurs, to judge from the sherds found, even during E. H. II, the shallow bowl with incurved rim and commonly with attached circular foot, which is most common during E. H. III.

Shallow bowl (fig. 154: 8). H. 0.06 m, d. 0.11 m. Inverted conical shape with curved sides and slightly incurved edge. Ring foot. Red clay; black glaze-paint.

It is obvious that the flattened base was not an ideal solution of the problem of conveniently disposing a vessel when not in use, the more so as we are able to prove that the flat bottom often resumed its original shape to a certain degree after firing,

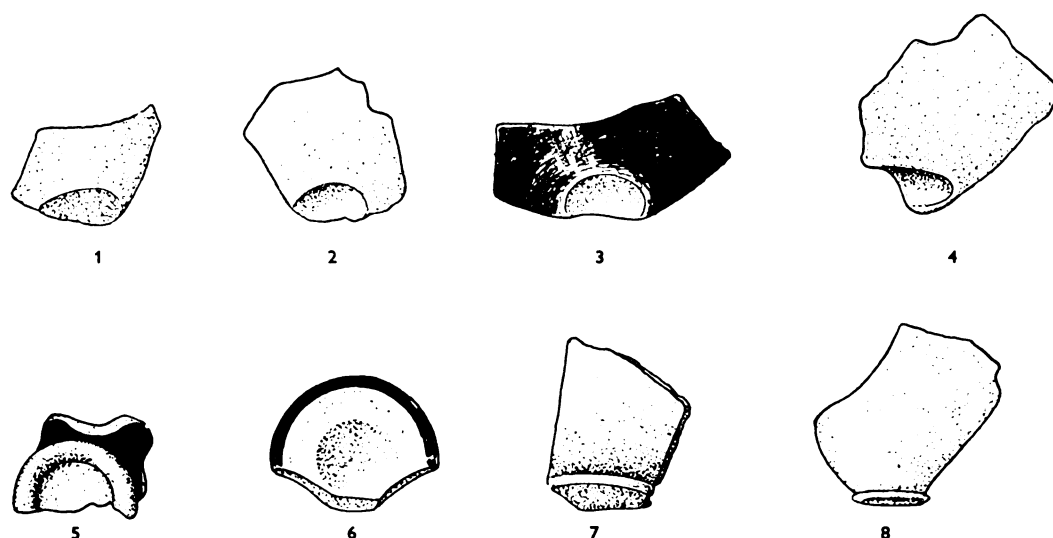


Fig. 155. Bases of E. H. II pottery.

so that the vases must have stood very badly and precariously. The typological development from a flattened bottom via a pressed-in base to a high ring-foot is illustrated by fig. 155: 1—8. The pressed-in base was clearly produced by pressing in a rounded plate (2), a round object such as, for example, the knuckle joint of a leg bone (3), a walking stick or something similar (4). Cf. in metal bowls from Troy, Dörpfeld, *Troja und Ilion I*, p. 353, fig. 285. This kind of base I have found at Asine only in E. H. II. Still more convenient, however, was a twisted strip of clay in the form of a ring, which was placed below the centre of the bowl and more or less worked into the body of the vase (5). I know nothing of an accentuated flat spreading foot except a few cases from E. H. III (7). On the other hand, the ring foot was still further developed into the high foot with convex sides, which is found chiefly in sauce-boats (6).

Fragments show that during E. H. II the beak-spouted jug superseded the jug with straight round lip. The older type, however, merely has the lip opposite the handle elongated into a point, not the abruptly cut-off beak with upright edges, which later on becomes common, and which it has in common with the sauce-boat. The type is illustrated by an example in unpainted ware found on Terrace II in the large trial trench (cf. fig. 77).

Beak-spouted jug (fig. 156: 1). H. 0.105 m, d. 0.09 m. Globular body curving up to meet the neck with no sharp articulation between them exactly as in the E. H. I type. Opposite the handle, the lip is protracted into a pointed beak. The handle is missing, but, as the traces of it show, was a vertical loop handle which stretched from the lip to the shoulder. Yellow, badly levigated clay; unpainted.

The sauce-boat is to be interpreted as something intermediate between the shallow bowl and the jug. The E. H. II fragments found belong to the high, round type,

not to the low one with exaggerated spout. We have not succeeded in reconstructing any in glazed ware, but a couple of specimens in unpainted ware may exemplify the type.

Sauce-boat (fig. 156: 2). H. close to the handle 0.085 m, d. above the handle 0.105 m. The body is as round as a bowl and the rim rises evenly towards one side — unfortunately the spout is missing on our specimen, but it was probably relatively small and protracted into a point, as on the beak-spouted jug. On the opposite side is a horizontal handle the shape of which is clearly imitated from a metal one. Ringfoot. Yellow, badly levigated clay; unpainted.

Patterned ware does not occur in E. H. II, but, on the other hand, unpainted ware is plentifully represented (cf. fig. 156: 1, 2) and also Coarse ware. These are the same types of vases that have already been dealt with before, but unpainted, with the addition of the saucer-like plate with flattened bottom in the same shape as before. In coarse ware the huge bowl occurs.

As well as the older forms we meet with a large jar or pithos with offset rim and bosses or knobs, obviously placed on the upper part of the body of the vessel instead of a handle (fig. 157: 2—3, glaze-painted; cf. Zygouries, p. 119; Eutresis, pp. 85, 89), furthermore a multitude of varieties of the large open bowl with or without horizontal handles (fig. 157: 1, 4—5, 7—8), a more closed, askoid form (fig. 157: 6, glaze-painted) as well as the kind of vase most characteristic of E. H., the sauce-boat (fig. 157: 11, black slip and glazed). The jug is represented by large forms with varying types of handles (fig. 157: 13—16; cf. Eutresis, p. 113).

Some fragments bear simple incised decoration of the same kind as that already met with during E. H. I, parallel rows of oblique dashes, »Kommaverzierung»<sup>1</sup> either in the same direction in both rows or in the opposite, so that a kind of herring-bone

<sup>1</sup> Cf. Dörpfeld, *Alt-Ithaca*, Beilage 57.

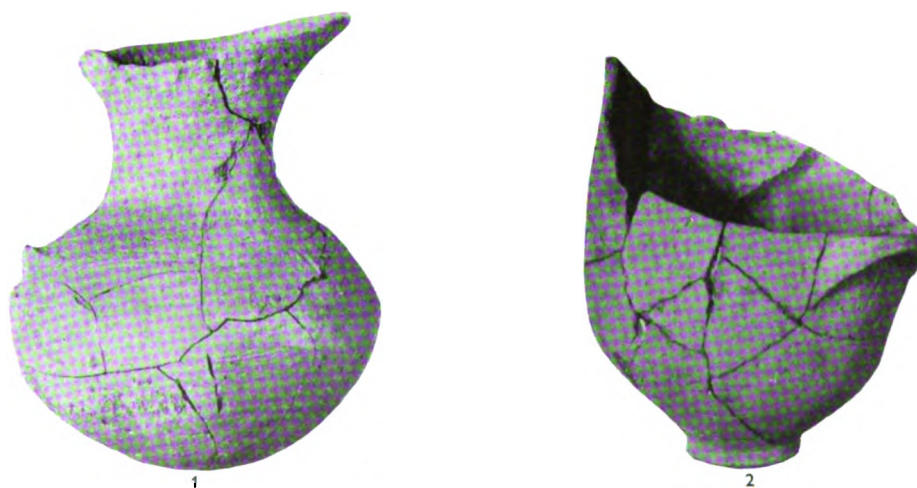


Fig. 156. E. H. II pottery.



pattern is produced (fig. 157: 2, 3, with both variations on the same vessel). On one sherd (fig. 157: 10) can be seen the herring-bone pattern combined with the circle. The circle as an ornament recurs on sherds belonging to two small, dark-faced vases, here combined with impressions, either round or triangular, made with a straw or a triangular bone, which quite fill the spaces between the larger and smaller circles. It can hardly be an error to see in these vases importations from the Cyclades — cf. Excavations at Phylakopi, p. 87 ff. and Pl. V. The same seems to hold good also for a fragment from Eutresis, Colour-Pl. IX, 1, which has precisely the same impressions around what I, because of the small circle in the middle, would like to call flowers with three petals, not »trefoils».<sup>1</sup> However, the technique with triangular impressions or incisions occurs frequently as a decoration on Helladic sherds (cf. fig. 157: 13, 14). It should be added that the decoration with deep incised lines, which is often met with for example on fig. 157: 15, 16, apart from its purely decorative function, also has a practical purpose, namely to facilitate thoroughness in firing, which also holds good for the plaited handles or handles formed of parallel clay strips.

The repertory of vase-shapes demonstrable at Asine is, therefore, not large and the potsherds show that the vessels, as a rule, were of small dimensions.

I wish once more to emphasize that our knowledge of E. H. I and II at Asine is based upon our deep excavations in narrow trenches, and the number of whole vessels recovered here is therefore very small, more especially so in comparison with E. H. III, which has produced a fine assortment of vases of the most varied shapes, from the foundations of houses belonging to this period which have been excavated. A proper deep excavation in the north-western corner of the Lower Town, and the clearance of the upper layers, might, however, easily remedy this.

### EARLY HELLADIC III

Our knowledge of this period is at present infinitely more complete than that of the two previous ones, which is not only due to a more developed culture and its richer and more varied expression but also to the purely stratigraphic conditions — the same holds good everywhere and not least in Crete. We have not as yet progressed so far as to be able, with a clear conscience, to clear away E. H. III in order to reach underlying layers with possibly still poorer culture. Moreover, the planning and filling in of ground, carried out in E. H. III, have certainly in many places if not altogether removed the older deposits, at least seriously disturbed them.

In dealing with the rich E. H. III material I take the liberty of first giving a description of the closed finds and vases that belong together where synchronism of certain types is obvious, and then making a synopsis of the collective material on the plan followed in the previous section.

<sup>1</sup> Thus Miss Goldman, Eutresis, p. 109 f.

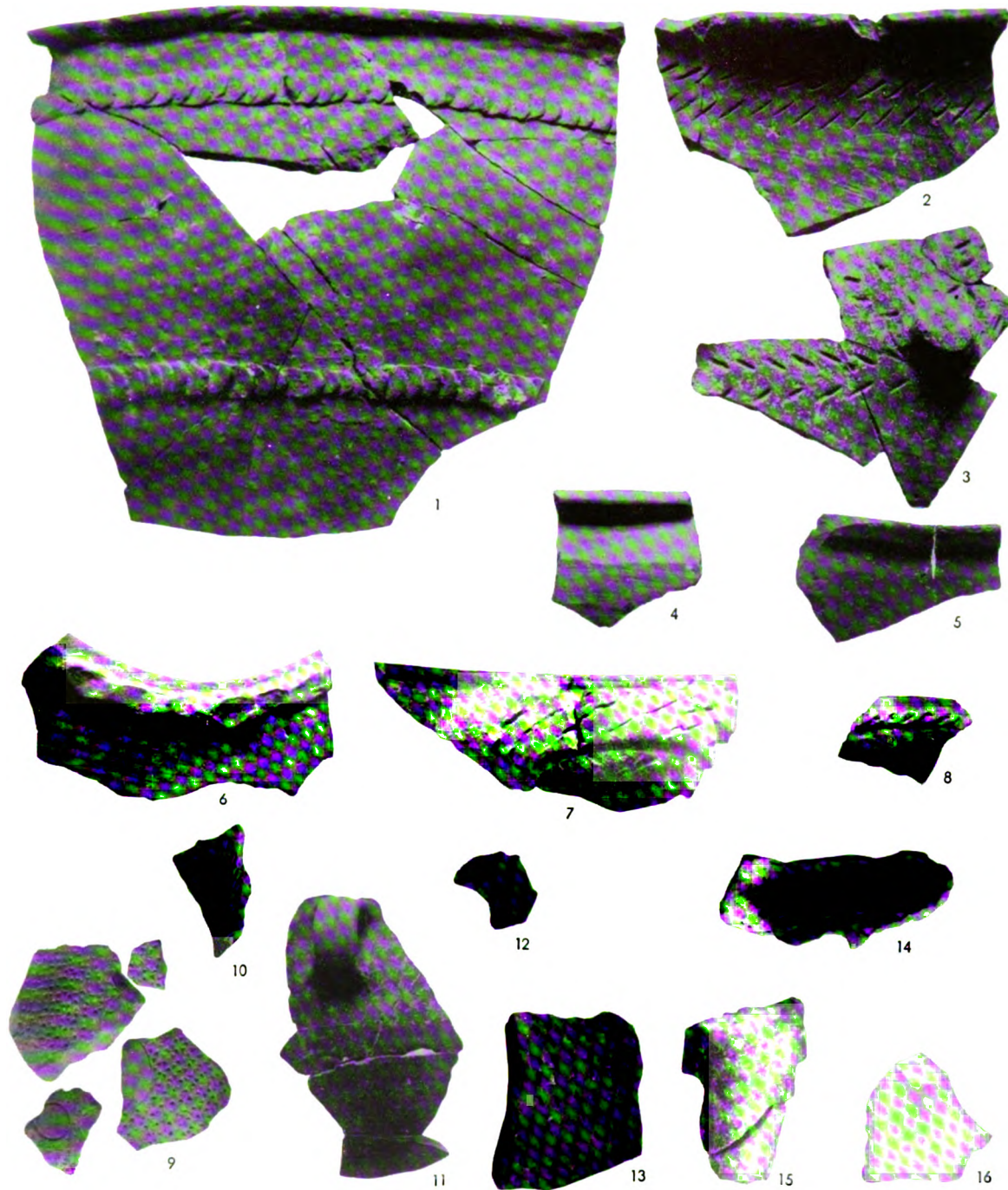


Fig. 157. E. H. II pottery. Polished ware.

## Closed Finds

I. Tomb E. H. 1. Three shallow bowls of different types; cf. above p. 42.

II. Tomb E. H. 2. Three shallow bowls of different types; cf. above p. 42.

III. Bothros on the pre-Mycenaean terrace. In a bothros on the pre-Mycenaean terrace were found large numbers of vases lying close to the surface, and consequently smashed, cf. p. 42. All the vases are undoubtedly of E. H. III date, and clearly belonged to the same house. The types here represented are large jars, both of globular and elongated shape, beak-spouted jug, pyxis, huge bowl, and shallow bowl.

1. Large jar, glazed ware (fig. 158: 1). H. 0.335 m, d. 0.34 m. Globular shape with two horizontal loop handles on the largest part of the body, high, slightly offset rim prolonged somewhat on one side between the handles, and turned down to form a shallow spout. Flattened base; dark clay; polished and decorated with thin, transparent paint and a raised band round the centre of the body on a level with the handles. On the back, extending over the greater part of the centre of the body, a large depression occasioned by a blow or knock before firing; on the front, at the top and bottom, similar ones on the side.

2. Large jar, partially glazed ware. Very much restored. H. about 0.42 m, d. 0.335 m. Elongated spherical shape with two horizontal loop handles at the middle of the body. High collar-like rim with faint slope outwards. Brownish-yellow clay; wide bands of thin, brown varnish in a belt round the middle of the vessel, where also a thin plastic ornament runs between the handles, and wide crooked lines of decoration over the shoulder and upper part of the body.

3. Large jar, unpainted ware. Fragment. H. of jar about 0.27 m. Shape as last but more spherical. Brownish-yellow clay.

4. Beak-spouted jug, unpainted ware. Fragmentary (fig. 158: 2). Height preserved 0.17 m, d. 0.13 m. The body is carinated with a low, broad neck and broad spout, which is missing. The vertical broad handle from the top of the neck to the middle of the body is slit up in the centre and made of two round strips of clay properly worked together where the handle joins the body; flattened bottom. Yellowish-brown clay; undecorated.

5. Pyxis, polished ware. Lower part restored (fig. 158: 3). H. 0.06 m, d. 0.085 m. Carinated with low, straight rim, intended to have a lid of the kind which is also illustrated here but does not belong to this pyxis. On opposite sides in centre of body are horizontal bosses intended to form double vertical string-holes (here rudimentary) which correspond to two horizontal ones in a similar vertical boss on the upper side of the lid. Greyish clay; dark polished surface corresponding to stone vessels in Crete. Cf. Nanthoudides, Mesará, Pls. I, 419; XVIII, 4188; XXV.

6. Shallow bowl, partially glazed ware (fig. 158: 4). H. 0.055 m, d. 0.15 m. Very open shape with straight sides and thin incurved rim and ring foot. Reddish clay;





Fig. 158. E. H. III pottery (1—4 from a bothros on the «pre-Mycenaean Terrace»; 5—11 from House R).

the rim both inside and out has a wide band of brown glaze-paint. Inside smoothed out before firing with a wet cloth.

7. Shallow bowl, unpainted ware. H. 0.055 m, d. 0.18 m. Very open shape with faintly incurved sides and a plain rim; flattened bottom. Yellowish-brown clay; unpainted.

8. Jar, cooking pot, fragment; coarse ware. Preserved height 0.23 m. Slightly convex sides, moulded rim with thumb impressions. Reddish, coarse clay.

9. Jar, cooking pot, fragment; coarse ware. Preserved height 0.12 m. Shape as last. Reddish, coarse clay.

IV. As a fourth, closed group I interpret the vases which have been found on the floor of E. H. house R on Terrace III (p. 91). In the northern apsidal room, close to a large accumulation of ash in the centre of the room, the place for the hearth were found the following vases:

1. Jar, coarse ware (fig. 158: 5). H. 0.235 m, d. 0.195 m. Spherical body with high neck and outward-curving lip; two round loop handles are set horizontally on the middle of the body. Flattened base. Coarse grey clay with yellow surface; unpainted.

2. Beak-spouted jug, polished ware (fig. 158: 6). H. 0.18 m, d. 0.15 m. Strongly flattened globular body with flat base and sharp shoulder; high neck curving out to the mouth, which opens to the front in a square-cut spout, and behind is joined to the middle of the body by a round loop handle with a knob at the upper end. Reddish clay with light cream-coloured slip, which has flaked off here and there. Excellent fabric. No. 1 and 2 found close to each other.

3. Beak-spouted jug, glazed ware (fig. 158: 7). H. 0.19 m, d. 0.16 m. Shape as last. The handle is missing but on the flattened surface where it joined the rim, there is a plastic imitation of a rivet, head. Red clay; thin brown glaze-paint.

4. Beak-spouted jug, glazed ware (fig. 158: 8). Preserved height 0.14 m, d. 0.13 m. Parts of the neck and handle are missing. Shape as last, but the neck is set at a still sharper angle to the shoulder. On the middle of the body, where it meets the lower end of the handle, a horizontal plastic elevation as on large jars. The handle consists of two strips of clay worked together at top and bottom, and having at the top a plastic rivet-head. Red clay; upper part of vase above middle belt covered with brown glaze-paint. Front of jug darker in colour through strong firing.

5. Plate, coarse ware (fig. 158: 9). H. 0.033 m, d. 0.175 m. Shallow plate with a large flat base (d. 0.095 m) and short wide-spreading sides. Coarse greyish clay; wiped with damp cloth before firing. In the middle of the inside the potter's mark, a hook from whose point issue two short lines at an angle to each other.

6. Plate, coarse ware. H. 0.055 m, d. 0.18 m. The sides rise at an angle of 30° to an abruptly cut-off rim. The foot was formed by pressing in the middle.

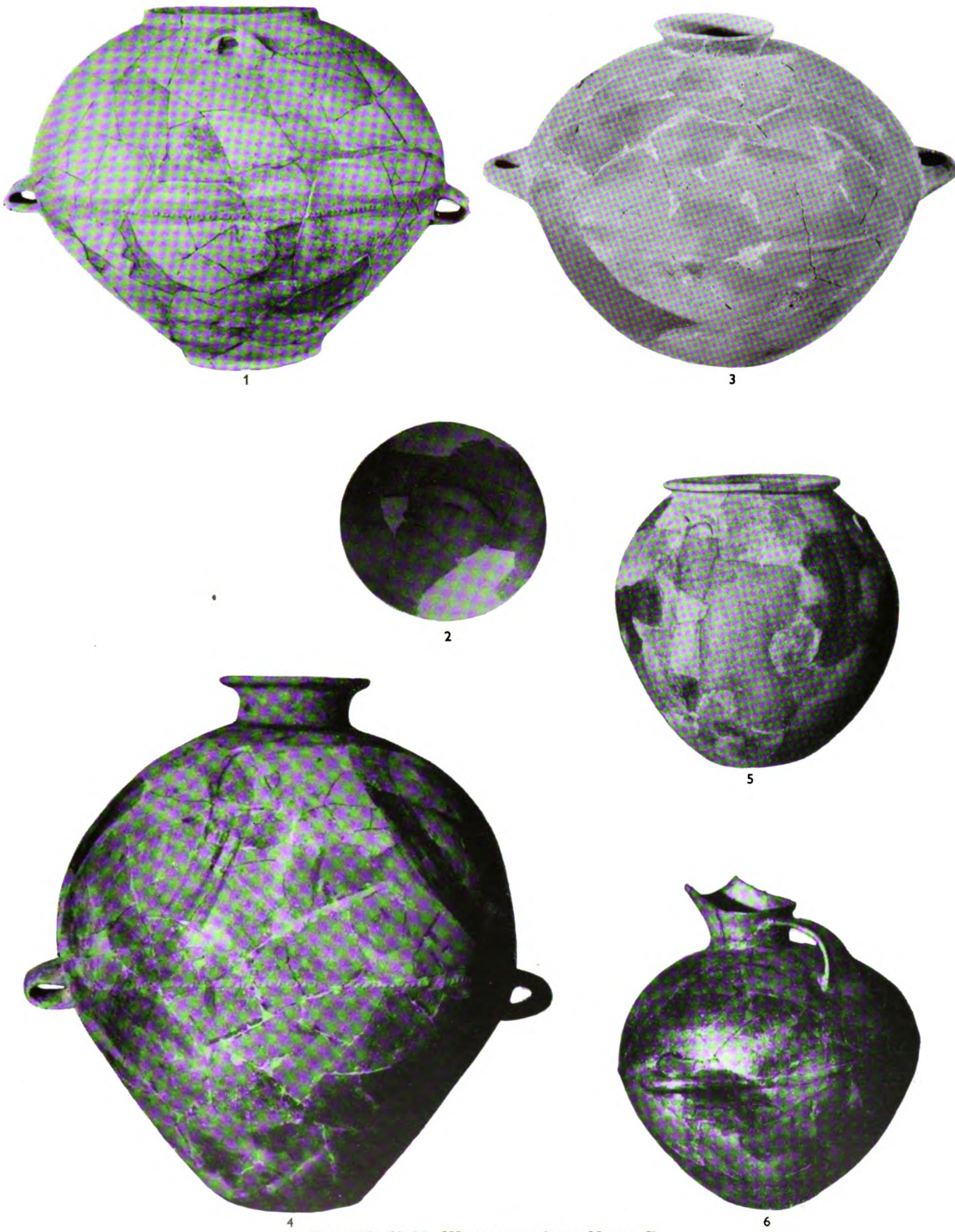


Fig. 159. E. H. III pottery, from House R.



7. Deep basin, faint red glaze-paint on the border (fig. 158: 10). H. 0.175 m, d. 0.35 m. Shallow shape with high foot, applied separately, h. 0.025 m, d. 0.115 m, and added later. The rim is flattened out and close to it in three places are three rudimentary handles. Yellow clay.

8. Jar, cooking pot; coarse ware (fig. 158: 11). H. 0.215 m, d. 0.255 m. Inverted conical shape with slightly curved sides and a ring foot. Brick-red, coarse clay, surface blackened by fire. Found very close to hearth.

From Room II came only two large jars:

9. Jar, partially glazed ware (fig. 159: 1). H. 0.48 m, d. 0.54 m. D. of mouth 0.22 m. Globular shape with very low, straight rim and flat slightly raised bottom. On the middle of the body two flat, narrow vertical handles; between them, on each side high up on the shoulder, near the mouth, a horizontal round loop handle by which was attached a lid of the type here reproduced near it, with a rope; the lid, however, was found in the most southern, Room III. This lid had on its upper side a similar vertical handle through the opening of which the rope passed from one of the shoulder handles to the other. Yellow clay, thin walls, excellent fabric. The decoration consists of two plastic bands on a level with the pair of handles, with overlapping discs, of which the one in the middle of the vessel is covered with a broad band of thin, brown glaze-paint.

10. Lid (fig. 159: 2). H. 0.07 m, d. 0.30 m. The lid has straight sides, intended to fit over the rim of the jar, and a slightly curved upper side with loop handle. Greyish-yellow clay; traces of wide loops in glaze-paint over handle and on upper side of lid.

11. Jar, partially glazed ware (fig. 159: 3). H. 0.345 m, d. 0.42 m, d. of mouth 0.125 m. Flattened globular body with short spreading neck, flattened bottom, and two horizontal, round loop handles on the middle of the body. Dull greyish colour; plastic girdle-band on a level with the handles the portion above it being covered with thin, transparent, brown glaze-paint.

In Room III were found, besides the lid mentioned above under No. 10, close to a bench carved out of the rock, some shallow depressions in the rock, in which had obviously been placed some large jars now broken. Close to and upon the bench, were found large quantities of charcoal and ashes, and it is probable that a furnace existed here. Here follows a description of the vases found in this room.

12. Jar, partially glazed ware (fig. 159: 4). The neck is restored, somewhat erroneously. Preserved h. 0.53 m, d. 0.54 m. Globular body tapering to base, flattened bottom, and two flat narrow handles set horizontally on the middle of the body. Yellow clay; plastic band with overlapping discs at a height of the handles and below the neck; four broad loops in black glaze-paint from the base to the neck, two on each side.

13. Jar, glazed ware (fig. 159: 5). H. 0.375 m, d. 0.40 m. Oval body, broad mouth, d. 0.225 m, with wide splayed rim and flattened base. On the shoulder, three rudi-

mentray double handles in the shape of bucrania with long, down-curved horns. Greyish-red clay; five broad loops in brownish glaze-paint from the bottom to the neck.

14. Intermediate shape between jar and beak-spouted jug; glazed ware (fig. 159: 6). H. 0.385 m, d. 0.39 m. Globular body tapering to base, flattened bottom, beak-spouted neck and broad, flattened vertical loop handle from neck to shoulder, with a plastic rivet-head at the neck. On the middle of the body, two horizontal round loop handles with plastic band between them round body of the vessel. Reddish clay, thin, even walls; brown glossy glaze-paint. Excellent fabric.

15. Jar, partially glazed ware (fig. 160: 1—2). H. 0.67 m, d. 0.67 m. Globular shape with flattened, but slightly convex, bottom. Relatively small low neck with offset rim. On the middle of the body two flat narrow handles set horizontally. Below the neck and at the same height as the handles two long plastic bands with overlapping discs. On the shoulder a row of impressions, 25 times repeated, of an E. M. III seal (a double swastika in double band incorporated in a circle), Four broad loops of black glaze-paint on the body; the neck is painted.

16. Dish, coarse ware (fig. 160: 3). H. 0.07 m, d. 0.365 m. Very open shape with rather broad rim at the top. Below the rim, on opposite sides, low, 0.21 m wide, supportson which the dish rests; on the inside traces of smoothing with cloth before firing. Coarse red clay; unpainted.

17. Sauce-boat, glazed ware (fig. 160: 4). H. 0.15 m. Deep, round shape with short, high spout, horizontal handle, and low ringfoot. Coarse red clay; black glaze-paint.

18. Jug, patterned ware (fig. 160: 5). The lower part of the body and parts of the neck are missing; as to the shape, cf. below p., 261 No. 15. Preserved height 0.16 m, d. 0.15 m. Globular body, wide, cut-away neck, lip with sharp corners, flat, broad handle. Greenish-buff clay; dull black glaze-paint. Round the body of the vase, in the middle, three broad, horizontal bands; on the upper four reticulated triangles, above them two zig-zag lines parallel with the sides of the triangles. Immediately below the neck a horizontal line touching the apices of the upper zig-zag line, and in the triangles thus formed on the shoulder three swastikas, one in each. The neck is girdled with broad bands, the handle hatched, the lip is painted. As to cut-away necks of Anatolian origin, cf. Forsdyke, *Prehistoric Aegean Pottery*, B. M. Catalogue, p. XII, 219.

Close to the furnace in Room III in the same E. H. III house were found two coarse vases, which are covered with soot and partly cracked by firing. They are also pronounced variants of types well-known from the tombs at Corinth and Zygouries (p. 109 and p. 113).

19. Low jar (fig. 160: 6). H. 0.11 m, d. 0.12 m. Broadly rounded body and offset rim with two relatively small loop handles set vertically about half-way down the body. Flat base. Black polish.



Fig. 160. E. H. III pottery, from House R.

20. Cup (fig. 160: 7). H. 0.085 m, d. 0.115 m. Somewhat depressed body and slightly out-curved rim, flat base. The handle has been restored, but its shape is certain.<sup>1</sup> The surface is blackish and lightly glazed.

A third specimen of coarse ware was found in Room I of the same E. H. III house R.

21. Cup (fig. 160: 8). H. 0.08 m, d. 0.085 m. The sides are first curved. High round loop handle from rim to middle of body of vase; straight, flat base. Coarse, red ware.

<sup>1</sup> Cf. different types of handles for small jugs from Eutresis, p. 87, fig. 105, of whose Early Helladic I date, I am doubtful.



This is an uncommonly rich collection of vases representing all types, polished ware, glazed ware, patterned ware, unpainted ware, and coarse domestic ware. The repertory of shapes is also unusually plentifully represented by jars of different kinds, and intermediate shape between jar and beak-spouted jug, jugs, both beak-spouted and with cut-away neck, sauce-boat, deep basin, cooking pot, dish, plate, lid for jar. The collection shows that a rich development and high level of culture had been reached.

From another part of the excavation area also a greater or less number of vases could be assembled as belonging to the same house, but as the remains of the floor are not so distinct, as in the case just mentioned, and as the extent of the house had not been quite clear when it was discovered, I prefer here to describe them instead under the previously applied classification, the type of the vase, with reference to these described above.

#### A. *Polished ware*

Polished ware still continues during E. H. III, but it is most commonly slipped ware and, particularly, Faience-ware; besides this there is also the type which has been smoothed with the aid of a cloth before firing.

Black Polished Ware or ware of kindred type to this has been found by us in group III, 5, and sherds belonging to this group are not rare in the latest layers of the E. H. III period, reminding one also very forcibly of the oldest Black Minyan ware from M. H. I. The shape of a large, open bowl has been reconstructed on paper but we do not know whether it had a spout (cf. Zygouries, p. 99, fig. 87), nor how the handles were placed.

Bowl (fig. 161: 1). H. 0.32 m, d. 0.42 m. Globular shape with very wide mouth, d. 0.30 m, with round, slightly outcurving rim. Spreading foot, cf. p. 222. Greyish clay; black polish; below the rim a row of incisions like dashes (*Kommaverzierung*) and round the middle of the body a plastic band.

Polished ware with slip is met with, as far as I have been able to make out, only in black and white, or rather cream-colour, whereas the red slip previously common has disappeared, displaced by glazed ware. As a specimen of black slipped ware is here reproduced a fragmentary pyxis from the »Polygonal Wall Terrace».

Pyxis (fig. 161: 2). H. 0.09 m, d. 0.15 m. Flattened carinated body with low, straight rim to fit under the lid; flat base. It clearly once had three round loop handles, set vertically, at equidistant points round the lower part of the shoulder. Light yellow clay; black slip so strongly glazed that it has flaked off in spots.

As specimens of white slipped ware we reproduce two shallow bowls found in a trial-pit dug in the north-western corner of the Lower Town, outside the fortress wall.

Shallow bowl (fig. 161: 3). H. 0.07 m, d. 0.17 m. Very open shape, somewhat irregular, with straight sides and strongly curved rim; ringfoot. Reddish clay; rather white or cream-coloured slip.

Shallow bowl (fig. 161: 4). H. 0.065 m, d. 0.165 m. Shape, clay, and slip as last.

This kind of slip can be described as an imperfect variant of the finest of all slip-ware, the Faience-ware. Occasionally, the slip has flaked off, so that the biscuit is now visible.

We meet Faience-ware much more often in this than in the previous period. The commonest shape is the sauce-boat, which, as far as I have been able to find at Asine, in this choice ware always has vertical handles. The imitation of the metal technique is easily recognizable in the shaping and attachment of the handle to the vessel (fig. 161: 6); it looks as if it had been hammered out and is occasionally grooved in the middle. Three fragments belong to a very large vase of the sauce-boat type, richly decorated with plastic rope-ornaments. Another type represented in Faience-ware is the shallow bowl in a molegrey tint, where the thin ringfoot shaped with the utmost skill is particularly noticeable. As an example of a sauce-boat of this ware is here reproduced a very much restored specimen from the »pre-Mycenaean Terrace«, found quite close to Tomb M. H. 108.

Sauce-boat (fig. 161: 5). H. about 0.10 m, d. 0.115 m. Deep, round shape with short, high spout and vertical loop handle imitating metal, with a groove in the middle. Yellow clay; yellow, red, black surface.

#### B. *Glazed ware*

Glazed ware undoubtedly takes first place amongst the finer wares during E. H. III. Alongside the completely coated ware already found during the preceding period, the partly coated ware now also occurs rather frequently, in greatest quantity towards the end of the period. Here follows a survey of the most important material not already mentioned in conjunction with the closed finds.

Jar, partially glazed ware, from Terrace II (fig. 162: 1). H. 0.64 m, d. 0.60 m. Globular body tapering towards the base, flattened bottom and low, relatively narrow mouth, d. 0.19 m, with offset rim. Two wide, flat narrow handles, set vertically, on the middle of the body. Yellow clay, dull-brown glaze-paint. The decoration consists of a plastic band, which is divided by small dashes into a row of beads, at the height with the handles. The painted decoration consists of a broad, wavy line running round the lower part of the body of the vase, a broad band at the level of the handles, and three, large loops from the wavy line at the base over the body and shoulder of the vessel; the rim and a small section of the shoulder are painted.

Jar, partially glazed ware, from Terrace III (fig. 162: 2). H. 0.39 m, d. 0.37 m. Flattened globular body, flat base, low rim turning obliquely outwards, d. 0.14 m, and two round loop handles set horizontally on the middle of the body. Reddish

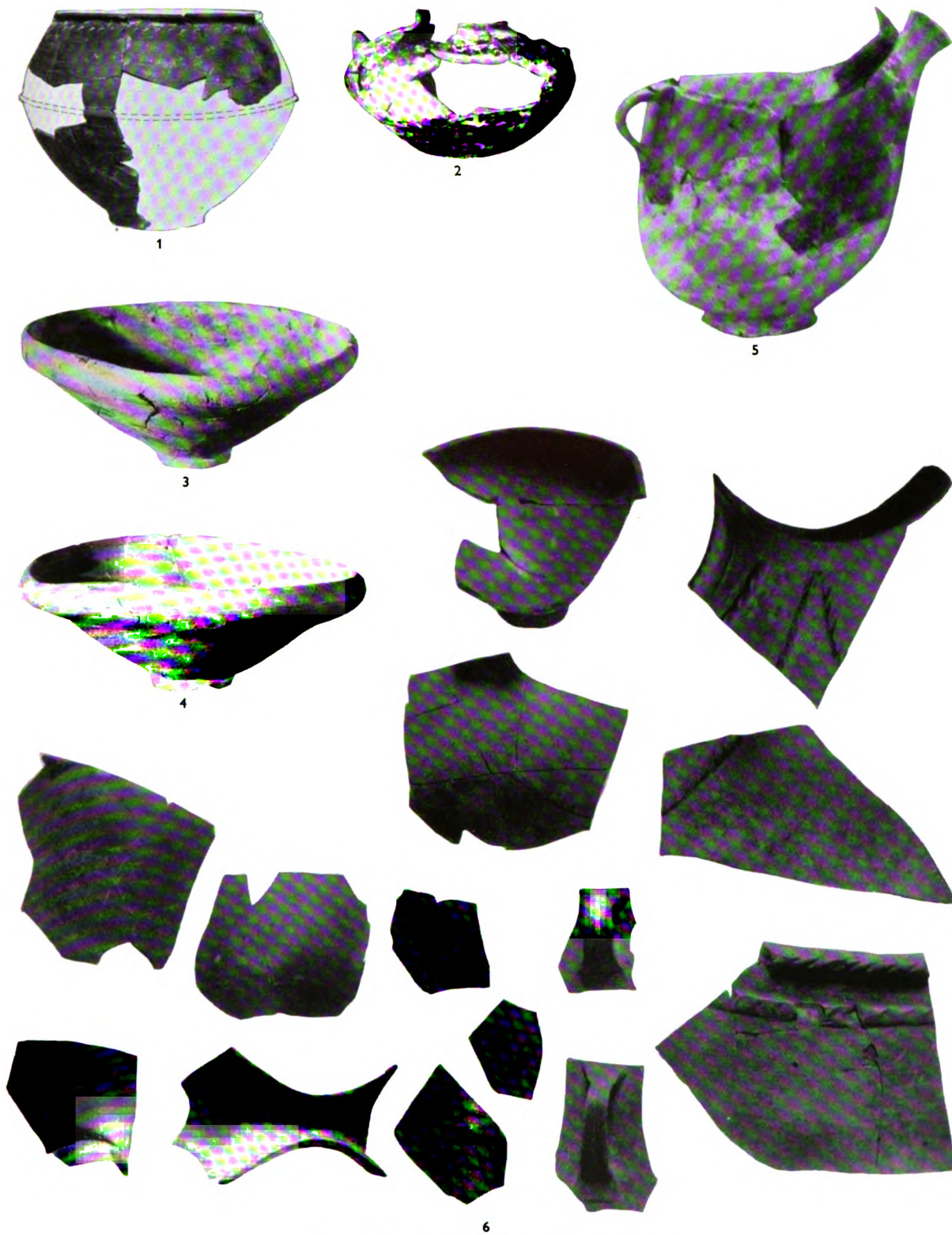


Fig. 161. E. H. III pottery. Polished ware.



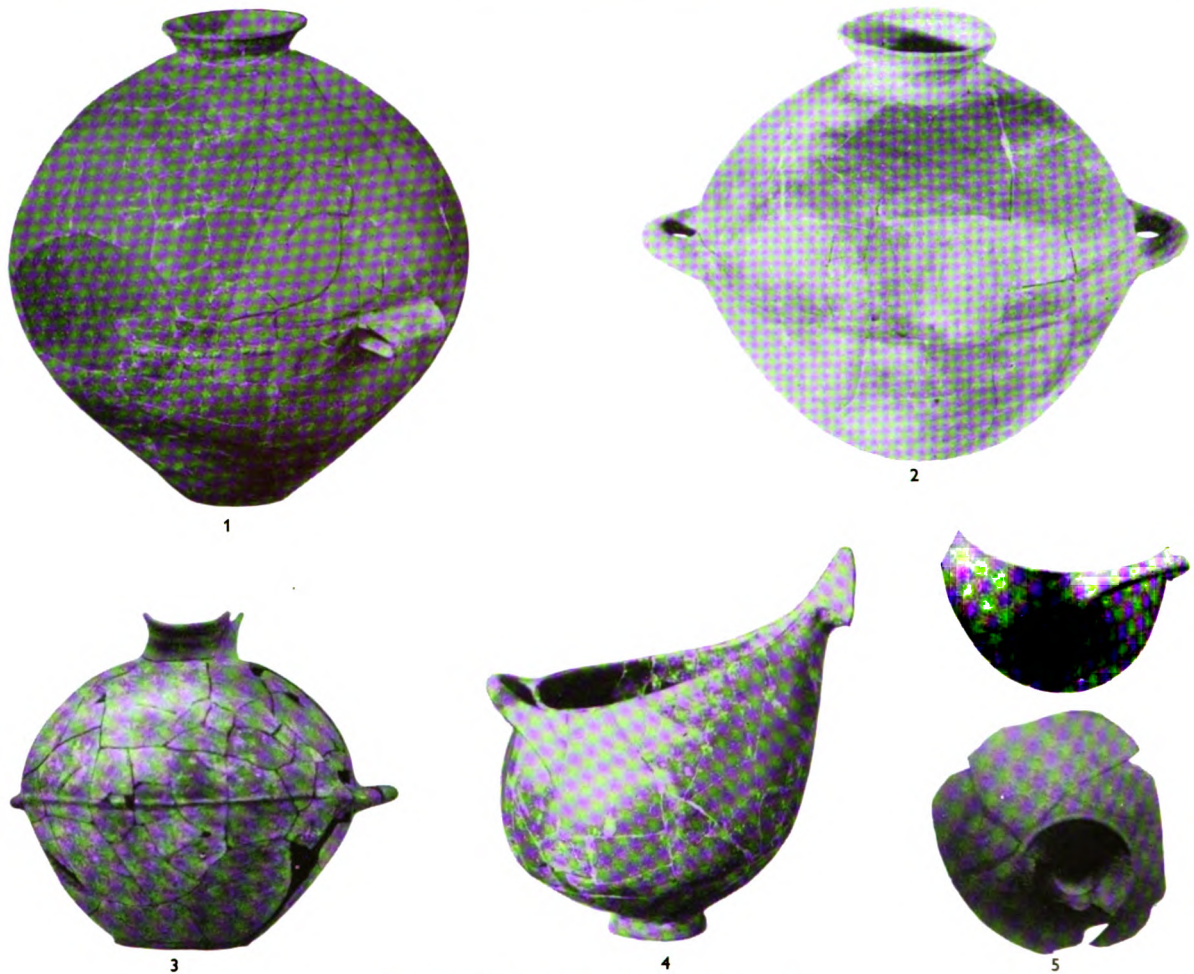


Fig. 162. E. H. III pottery. Glazed ware.

clay. Plastic band on a level with the handles, which, like the rest over the plastic band and the rim, up to half its height, are covered with a thin, dark paint.

Jar, glazed ware, from the «pre-Mycenaean Terrace» (fig. 162: 3). H. 0.32 m, d. 0.34 m. Globular body, high neck curving outwards, flattened base; two loop handles set horizontally on the middle of the body. Dark clay, polished and covered with thin, transparent paint; on the level of the handles a narrow plastic band. In shape, clay, and finish precisely like jar, fig. 158: 1, undoubtedly from the same workshop.

Beak-spouted jug (much restored), glazed ware from the «Polygonal Wall Terrace». H. 0.165 m, d. 0.13 m. Flattened globular body with high cylindrical neck. Flat handle cleft in the middle, reaching from below the neck to the shoulder. Reddish clay; black-red varnish.

Beak-spouted jug; partially glazed ware, from the «Polygonal Wall Terrace». Spout and lower part of body with base are missing. Height preserved 0.15 m, d. 0.135 m. Flattened, carinated body with acute angle in the middle and high cylindrical neck;



round loop handle from neck to middle of body, with plastic imitation of a rivet-head close to the neck. Yellow-greyish clay; black paint on body and lower part of neck.

Sauce-boat, completely glazed ware from Terrace II (fig. 162: 4). H. 0.195 m, d. 0.145 m. Deep, round shape; short, high spout, horizontal handle, ring foot. Red clay; black paint.

Sauce-boat, completely glazed ware from the »Polygonal Wall Terrace» (fig. 162: 5). Bottom and rear part with handle of a large sauce-boat. High foot with spreading sides. Red clay; black and red paint.

Fig. 163 reproduces six bowls, all belonging to E. H. III, but to judge from the evidence, to its first half. They all come from the accumulations of sherds on the acropolis.

a. Bowl, completely glazed ware (lower row to the left). H. 0.065 m, d. 0.125 m. Inverted conical shape with steep shoulder and upright rim; small ring foot. Greyish clay; black paint.

b. Bowl, completely glazed ware (lower row, centre). H. 0.10 m, d. 0.18 m. Inverted conical shape with curved shoulders and in-curved rim; ring foot. Reddish clay; black paint.

c. Bowl, completely glazed ware (lower row, right). H. 0.065 m, d. 0.12 m. Shape like last but sharp angle at shoulder and straight rim turned inwards. Greyish clay; red and black paint, merging into one another (cf. mottled ware).

d. Bowl, completely glazed ware (upper row, centre). H. 0.065 m, d. 0.125 m. Shape like last. Red clay; black and red paint.

e. Bowl, partially glazed ware (upper row, left) H. 0.07 m, d. 0.09 m. Inverted-conical shape with steep shoulder and upright rim; very small ring foot. Reddish-yellow clay; outside and inside of rim covered with brown paint.

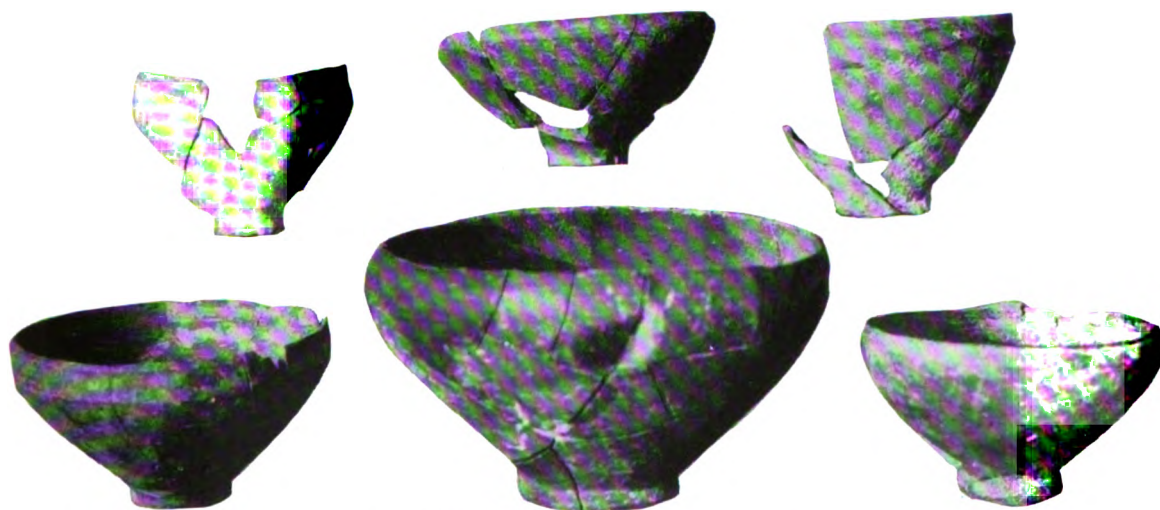


Fig. 163. E. H. III pottery. Glazed ware.

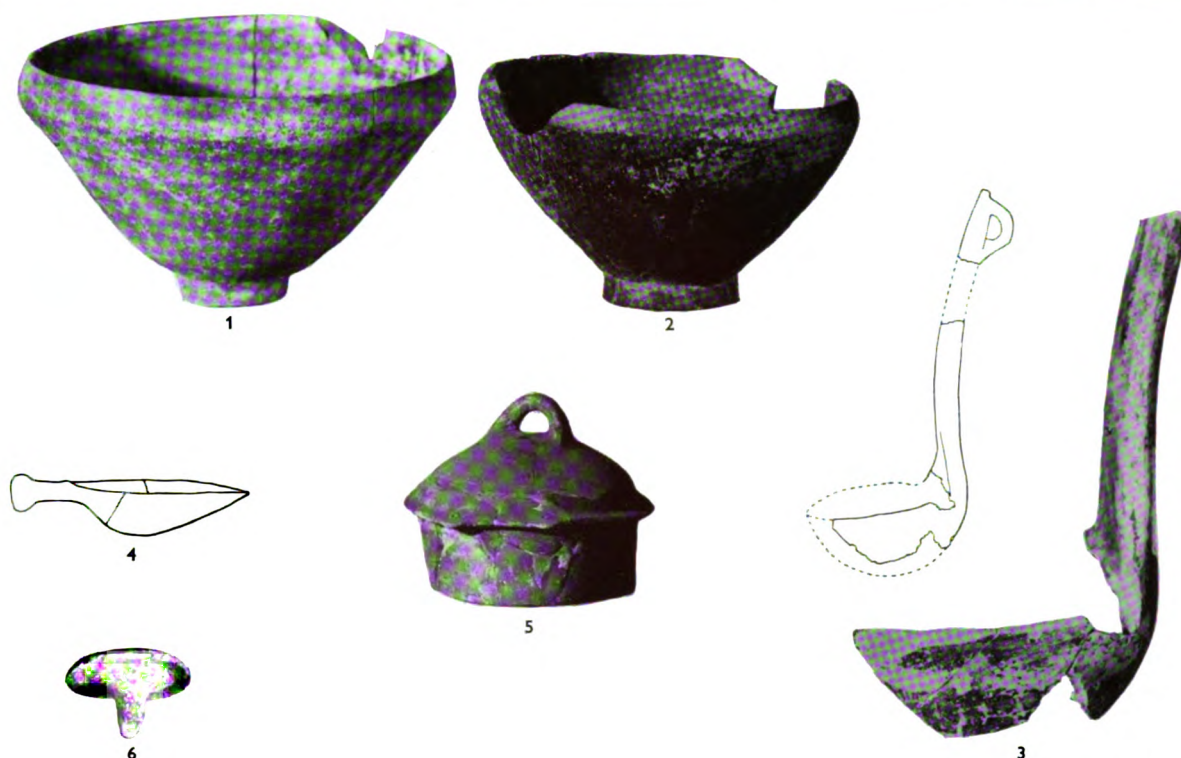


Fig. 164. E. H. III pottery. Glazed ware.

f. Bowl, partially glazed ware (upper row, right). H. 0.08 m, d. 0.10 m. Shape like last, but lower rim. Clay and paint like last.

The bowl is further represented by some specimens from the Lower Town.

Bowl, completely coated ware, Terrace III, Room V, House S (fig. 164: 1). H. 0.08 m, d. 0.135 m. Inverted conical type with blunt shoulder and straight rim; very small ring foot. Red clay; dull black paint.

Bowl, completely coated ware; Terrace II, upper part of trial trench (fig. 164: 2). H. 0.06 m, d. 0.11 m. Shape like last but rim turned inwards; ring foot. Red clay; red and black paint.

Bowl, partly coated ware; »pre-Mycenaean Terrace». H. 0.065 m, d. 0.145 m. Shape like last. Reddish-yellow clay; red and black paint on rim.

To the E. H. III repertory of shapes belong also the dipper and spoon. Very many fragments have been met with, being most numerous in the earlier accumulations on the acropolis. It is worth pointing out, in particular, that not a single fragment of dipper or spoon has been met with on the floor in the late E. H. III house R on Terrace III. With this agree Blegen's observations with regard to dippers in Zygouries (p. 96 f.), and we are undoubtedly right in referring these types to the older stages of the period — later on they were surely only made in less fragile material, such as wood, metal, and horn.



Dipper, completely glazed ware; from the accumulation on the »Polygonal Wall Terrace« (fig. 164: 3). Fragment. Preserved h. 0.18 m. Circular cup, narrowing gradually; from one side runs out a long handle, flattened at the lower part, the extreme end of which either has a loop on the back, or is itself curled back and round, so as to form a ring by which to suspend the dipper.

Dipper (handle missing), Terrace III. Round shape. H. 0.045 m, d. 0.095 m. Brownish-grey, smoothed, coarse clay (Minyising).

Spoon, completely glazed ware; the handle from the accumulation on the »Polygonal Wall Terrace« (fig. 164: 4) and the bowl from the Geometric house on the acropolis. The spoon preserved d. 0.085 m, d. 0.06 m. Pointed oval shape, narrowing gradually towards the point. At opposite end a short, stout handle terminating in a button-shaped protuberance.

Before we leave glazed ware we must take into consideration the method of closing of the different types and their lids. But first of all a miniature vessel belonging to this category.

Jug, completely glazed ware; Terrace III. H. 0.04 m, d. 0.025 m. Oval body with flattened bottom and gentle transition to spreading, circular neck. Round loop handle from the neck to the middle of the body.

As to the lids, we have already had an opportunity to mention the types fitting over the rim of the vessels, both for pyxis (fig. 158: 3) and for jar (fig. 159: 2). Here belongs also a lid of the type Zygouries, p. 88, fig. 76, right. But we have also lids that fitted inside the rim and some which rested altogether on it, of the same type as are common in the Hellenistic-Roman period. Perhaps some of the flat plates were used for the same purpose.

Lid, completely glazed ware; Terrace III (fig. 164: 5). H. 0.115 m, d. 0.15 m. H. of the lower part 0.045 m lower, d. 0.11 m. The lower part has straight walls that slope obliquely upwards and outwards, above which is a horizontal projecting rim approximately one cm wide with a couple of vertically pierced projections on opposite sides; the upper part is arched and provided with a vertical loop handle parallel to the small projections on the rim. Greyish clay; thin brown paint. Lids of this type may have been used for closing both larger pyxides and jars with straight necks, which were then probably provided with string-holes corresponding to the small vertical holes in the rim, the mouth being flattened; there were possibly horizontal loop handles on the shoulder.

Lid, partially glazed ware; Lower Town, Square C 4. H. 0.035, d. 0.05 m. Flat shape with slightly up-turned edge and a high knob in the centre. Light yellow clay; black paint on the knob and at the edge.

Besides these, finally the stopper might also be mentioned.

Stopper, completely glazed ware; from the stratigraphical excavation in the N.W. corner of the Lower Town, E. H. II layer (fig. 164: 6). H. 0.035 m, d. 0.04 m. Flat

disc with round, tapering projection on lower side. Coarse red clay; black paint. The discs are not bent at the edge, in which case one might have thought of turning it upside down and considered it a lid of the previously described type. Stoppers of this type could only be taken into consideration for vessels with very narrow mouth possibly those with spouts, such as, for example, Zygouries, p. 104, fig. 89.

Finally, for the sake of completeness, may here be mentioned lids in the shape of clay discs pierced in the middle (cf. Eutresis, p. 95 with fig. 95) though this type has not been met with in the E. H. deposit at Asine, but, on the other hand, large numbers occur from M. H. though of smaller size. It is not improbable that the stopper was placed in the hole of such a lid, when the jar was to be completely closed, as Miss Goldman supposed.

As to the decoration of glazed ware during E. H. III, the potters were as a rule satisfied with glaze-paint only, and, as is seen from the vessels described above, the partially coated ware has gained more and more ground. When the paint came to be more sparsely used, as a rule it is employed for a broad band round the mouth of the vase, occasionally combined with a cross on the inside of the flat plate or shallow bowl (Zygouries, p. 82, fig. 69) and from Asine too there are some sherds with similar decoration. On the large jars beside broad horizontal bands and wavy lines broad, plain loop bands also occur, which run across practically the whole vessel. From this point to the patterned ware is a fairly short step.

#### C. Patterned ware

Patterned ware is, at Asine, as in other places, comparatively rare, and is met with in relatively late layers. Of the two types, dark on light and light on dark, only the former is a native of Asine, as is more or less the case all over the Argolid and, as is shown by finds made at Zygouries and Korakou. Light on dark is only represented at Asine by a few small sherds (fig. 165), while this type occurs in larger quantities in Boeotia, at Eutresis, and Hagia Marina, whence in fact it received its name, Hagia Marina Ware. Otherwise, it seems as if patterned ware could display more local differences than any other pottery during the E. H. period.

Fig. 165 shows in the upper left-hand corner some light on dark sherds. Then follow some neck ornaments of askoid vases, with bands from which radiate clusters of parallel lines. At Asine only a few sherds were found with parallel lines, two of which are connected by small cross lines, a pattern that is often met in Berbati and in Zygouries, cf. p. 102 and Colour-Pl. XII, but on the other hand it seems to be missing at Eutresis. Farthest down on the right are some fragments of a pyxis of the same type as that in black polished ware, which has been reproduced in fig. 161: 2. Greenish-buff clay. Round the middle of the body of the vessel runs a painted band, from which rise hatched triangles with their apices near the rim — probably five in number in the fields between small handles. A fragment of a similar pyxis is seen on the

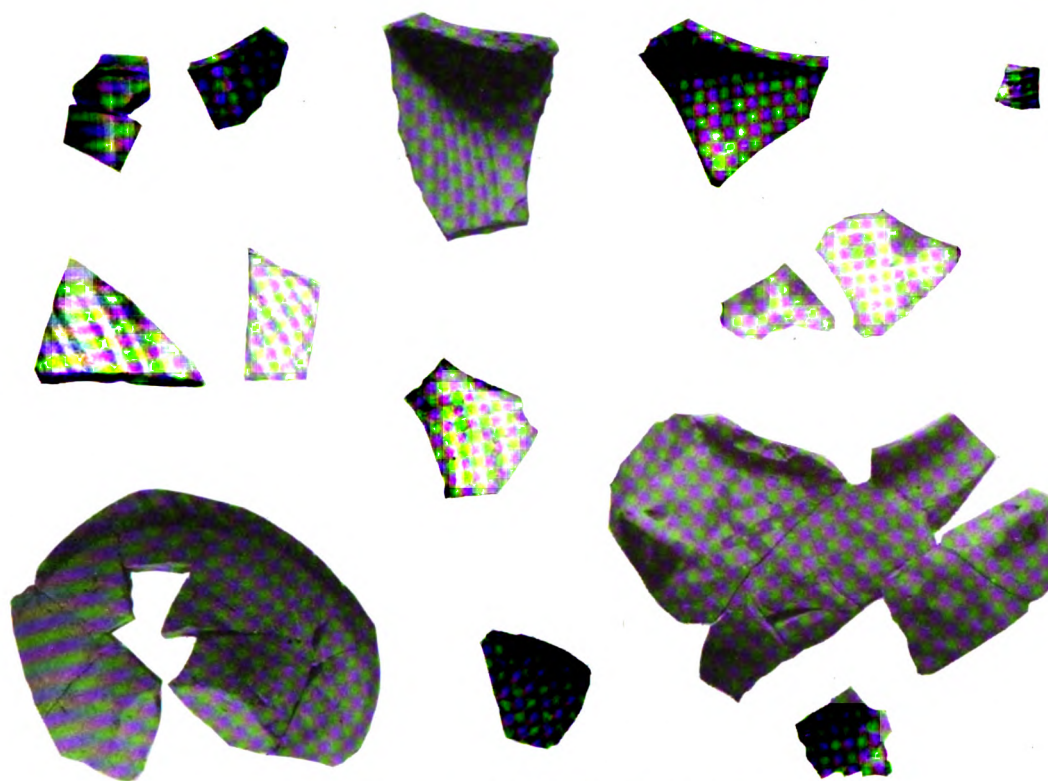


Fig. 165. E. H. III pottery. Patterned ware.



Fig. 166. E. H. III pottery. Patterned ware.



left of it, likewise of greenish-buff clay. Round the middle of the bodies of the vases and between the five small handles which must have been there, there are mutilated triangles the tops of which are filled with net-pattern.

Cylindrical pyxis, Terrace IV, upper part (fig. 167). H. 0.07 m, d. 0.08 m, Cylindrical body with two small vertical string-holes in a projection near the upper rim. The body of the vase is divided by lines at the mouth, in the middle, and near the base, into two zones with hatched triangles, with their apices downwards. Greenish clay, dull, thick, blackish paint. The shape is very likely an imitation of stone ones, and in the Mesará tombs are found various similar stone vessels. One of the stone vases from Platanos, which have, certainly wrongly, been termed by Xanthoudides »double kernoi» — they are quite certainly toilet caskets — has the same decoration, but incised.<sup>1</sup> Similar ones are met with in clay with incised patterns at Phylakopi.<sup>2</sup> On the base of the Asine pyxis are four groups of lines, each one consisting of two concentric curved lines, opening outwards, by which the figure of a reserved cross is obtained.

Beak-spouted jug. Some sherds permit of reconstruction into a beak-spouted jug. This is a small vase with carinated body with squat lower part spreading out at a sharp angle; then it rises in a more rounded curve to a low neck with beak-spout. The vase is made of soft, yellow clay. The surface is decorated with irregular lines in brownish glaze-paint, running from below the neck to the base. The same decoration is met with on a small pyxis from Zygouries, p. 105 and fig. 88, 5.

Jug with cut-away neck; from Terrace III, Room V, House S. Neck and handle are missing, reconstructed after fig. 167: 2. H. about 0.15 m, d. 0.11 m. Globular body, flattened base. Greenish-buff clay, black, dull paint. Upper part of body of vase is enclosed between bands filled with lattice triangles with great triple chevrons above the up-turned apices. Below this decorative belt two bands, and probably the neck was also so painted, cf. fig. 160: 5.

Some sherds (fig. 165) also give examples of the dotted decoration which we meet in Zygouries, p. 104, and which has parallels in Phylakopi, Pl. XI, 6.

These are the new vase-shapes, squat pyxis with five small handles, cylindrical pyxis, jug with cut-away neck and beak-spouted jug, which are now added to the meagre assortment of Early Helladic Patterned Ware; some of them also show new patterns, the lattice triangle, the hatched triangle, the net-filled mutilated triangle.

#### D. Unpainted ware

To Blegen's group of »Unpainted Ware» (Zygouries, p. 106 ff.) may first of all be referred a series of shallow bowls. The border-line between this group and »polished ware» is rather vague, especially as the surface of these bowls had in some cases been wiped with a wet cloth before firing.

<sup>1</sup> Cf. Xanthoudides, Vaulted Tombs of Mesará p. 99 and Pl. X, as well as Pl. LII, No. 1632.

<sup>2</sup> Cf. Phylakopi, Pl. IV, Nos. 1, 2.



Fig. 167. E. H. III pottery. Patterned ware,

Shallow bowl, Lower Town, Square D 3 (fig. 168: 1). H. 0.055 m, d. 0.11 m. Conical shape with straight sides and flat base, Red, badly cleansed clay. The base bears the impression of a round, plaited mat.

Shallow bowl, Terrace III, southern part facing Terrace II (fig. 168: 2). H. 0.04 m, d. 0.075 m. Shape and clay like last. The base bears impressions of a straight, plaited mat.

These impressions of mats have their counterpart in Zygouries, p. 106 f., in Eutresis, p. 88, and in the Cyclades, cf. Phylakopi, p. 94 ff., where the nature of the impressions and their origin are discussed in detail. Mr. Myres' theory stated there, to the effect that the mats were used as a sort of wheel, I have also myself advanced without being aware that it was not my own. For the vases are in many instances — as is the case with those described above — so small and light, and the impressions so deep, that they cannot possibly have been caused by the still moist vase having been placed on a mat to dry; this is the opinion advanced by Edgar, Phylakopi, p. 95 f. and Miss Goldman, Eutresis, p. 88. The vases must have been worked with the mat as a support and the bottom pressed flat upon it. The mat, a round one perhaps made in that shape solely for this purpose, or a cut from a straight-plaited one, was easy to turn during the work, and, of course, marked a great advance on the road to the potter's wheel, for which there was still a couple of centuries to wait at Asine. That many of the mats, to judge from the impressions, once had a considerable diameter, and that the vases were frequently set down on them quite away from the centre, can hardly be considered as a serious objection to the theory, as we are certainly entitled to presume the use of pieces cut from large mats, which had formerly



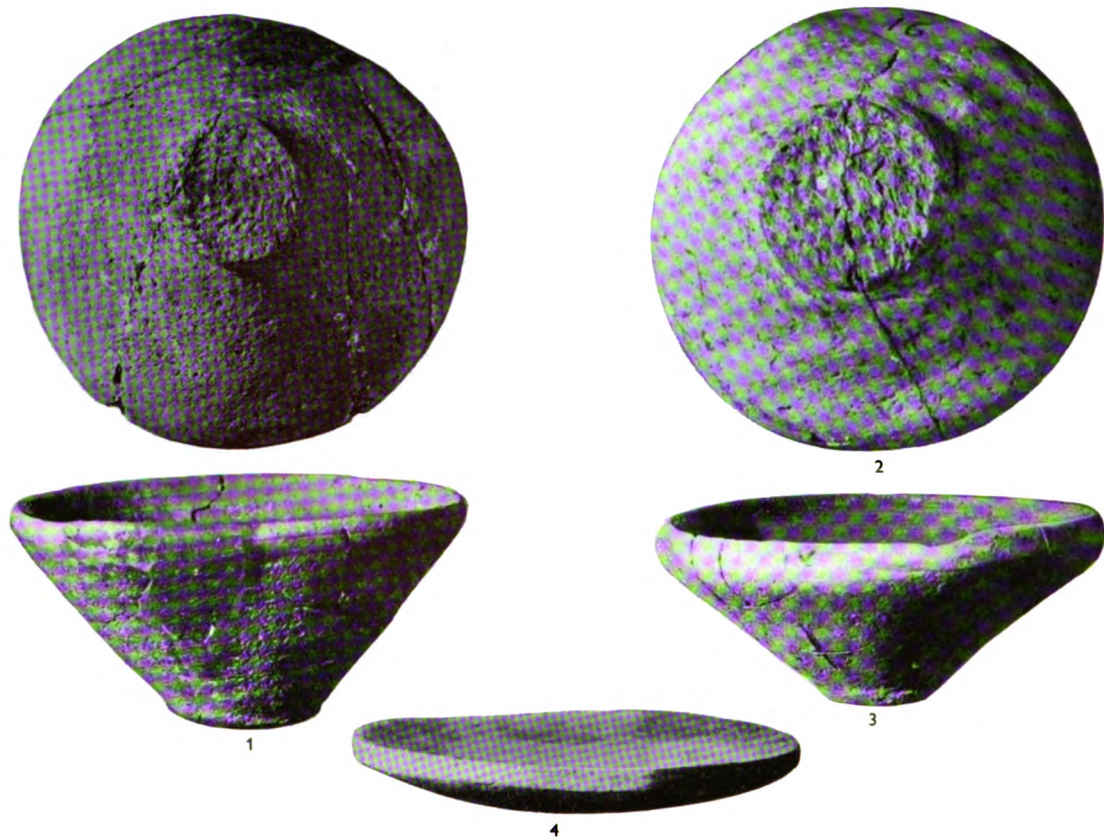


Fig. 168. E. H. III pottery. Unpainted ware.

been put to some other use. Edgar states that similar impressions had been found at Troad and at Tordos, in Dacia, and one specimen in Northern Italy, likewise in Cyprus — one of the many links between the Aegean and the North during the early Bronze Age. From Asine come a large number of such impressions, all of them, as far as it has been possible to judge, from E. H. III — but some of them are on coarse ware, difficult to determine. Besides, we have found unfired clay with exactly similar impressions in the E. H. III house; they are being dealt with later on in conjunction with the seal-impressions.

Shallow bowl, Terrace III (fig. 168: 3). H. 0.06 m, d. 0.145 m. Low, wide shape with the rim curved inwards; low ring foot, well worked into the body of the vase. Red clay. On the outside, half-way between the base and the rim, an equal-armed cross incised in the clay before firing.

Precisely the same sign has been met with on two other fragments of bowls from Asine, and is also to be seen in Zygouries, p. 107, and in Phylakopi, p. 179. We shall revert to these pottery marks later on.

Bowl, Terrace III. H. 0.03 m, d. 0.045. Rather high shape with straight sides and rim; flattened base. Red clay.



Plate, Terrace III (fig. 168: 4). H. 0.025 m, d. 0.165 m, d. of base 0.085 m. Very flat shape with slightly raised sides and straight edge. Yellow clay.

To the same group belong quantities of sherds which hint at other shapes, not represented by reconstructed specimens. One may definitely conclude the existence of low jars (cf. Zygouries, p. 109) and very large jars of the same type as those described above under partially glazed ware from House R. For we have large numbers of broad loop handles of the same type as Blegen illustrates in Zygouries, fig. 99, which must surely belong to the aforesaid type of vase.

#### E. Coarse ware

We have found at Asine fragments of enormous storage vessels of the same type as those illustrated in Zygouries, figs. 111—112. One of the largest could be fitted together up to a height of 0.70 m, and at that point had a width of about 1 m, with a still increasing circumference. The body of the vessel decreases strongly towards the small, flattened base, d. 0.22. Unfortunately, we have not succeeded in completely reconstructing some of these pithoi, either those with knobs or with real handles. They were also decorated with bands of overlapping discs and broad, raised bands, which surrounded the body of the vase and are adorned with simple geometric patterns, e. g. zig-zags, hatched triangles, continuous herring-bone patterns (fig. 169: 1—5). Exactly the same patterns are found also as decoration on the raised, broad rim of enormous, coarse dishes. There occur, furthermore, closely massed spirals — we have the same patterns on a broad, flat narrow handle in polished ware. As to the rest of the ornamentation, the old rope-decoration, with thumb-impressions, overlapping discs, oblique cross-lines, etc., is still alive. A small piece of rim with another plastic ornament, consisting of a round disc, and below it a crescent, belongs essentially to glazed ware, and may be placed beside the vessel with the rudimentary handles in the shape of bulls' heads with down-curved horns.

One form of vase that we have not succeeded in reconstructing is a large, round, deep dish with rudimentary plastic handles, d. 0.038, another is a flat dish one with outward-sloping, faintly curved rim (fig. 169: 1). Various fragments of large tripods have been met with. We reproduce here an approximate reconstruction of one of these, clearly intended to support a vessel with a rounded bottom (fig. 169: 6). It reminds one to a certain extent of the specimen reconstructed by Miss Goldman, Eutresis, p. 195, but as far as I have been able to ascertain we must not in this case assume any deep hole in the middle; on the other hand it probably had upstanding horns above the feet. On the outside it has short incisions below the arch.

In this connection it may also be noted that in the bothros on the »pre-Mycenaean Terrace», where the previously described vases were found, were discovered the remains of a coarsely made, poorly fired brazier in the shape of a double horn on a round,

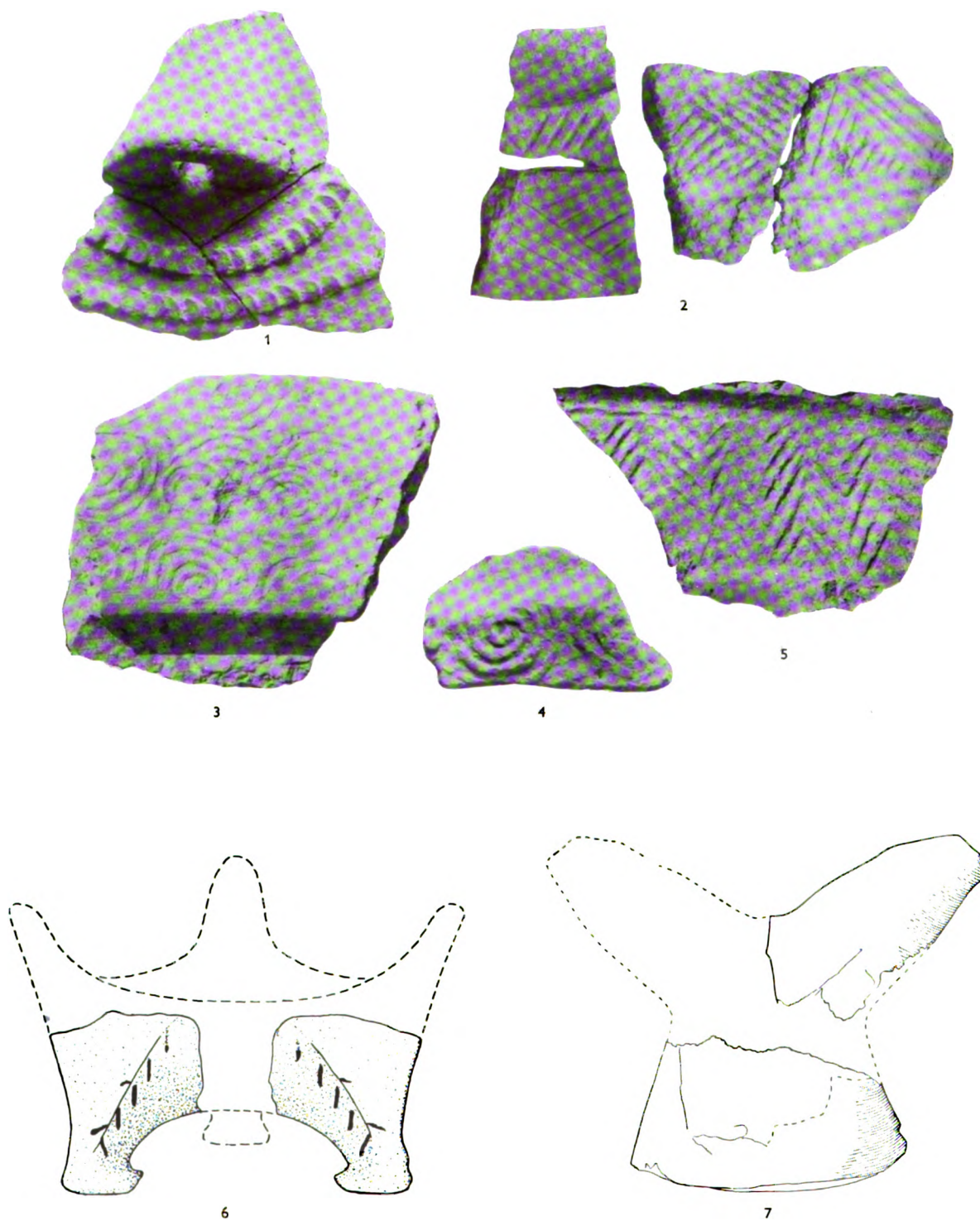


Fig. 169. E. H. III pottery. Coarse ware.

relatively high base. Its nearest counterpart comes from the Cyclades.<sup>1</sup> Both differ in their height and their round shape from the Cretan »horns of consecration», which Sjövall wanted to explain as fire-dogs.<sup>2</sup> This idea seems to me well worth noting, and several of the »horns of consecration» which come from Crete may without difficulty be imagined as having been put to this use; this holds good chiefly for that which is considered as being »the prototype of the horns of consecration», viz. that from Mochlos.<sup>3</sup>

Everywhere in the E. H. III layers at Asine large quantities of tiles have been found, either with or without thin glaze-paint, mentioned already in Rap. pré., p. 62. As to their use, there can now no longer be any doubt, because in the deep excavations of 1930 they were found *in situ* just above the rough stone walls that had been knocked over and the calcined roof beams from the latest E. H. house, Square G 14. The tiles are square, smooth slabs without any groove or hole for fastening, wherefore it must be assumed that the roofs of the E. H. houses were flat. The measurements of the tiles vary considerably: whole specimens measure  $0.215 \times 0.18 \times 0.015$  m,  $0.25 \times 0.235 \times 0.02$  m,  $0.28 \times 0.225 \times 0.017$  m. (fig. 170). At Tiryns also fragments of similar tiles were found in connection with the large, round building, even if their use there could not be determined.<sup>4</sup> As regards the manner of their production, cf. Müller, *ibid.*, p. 85.



Fig. 170. E. H. III roofing-tile.

Of the utmost importance is the discovery of some typical Cycladic sherds in the pure E.H.III deposit. The most characteristic one is reproduced here (fig. 171), a fragment of a so-called frying pan, found during the deep excavations in Square G 14 of the Lower Town, in the E. H. III deposit between the two burnt layers. Similar ones have previously been found on the acropolis. It is typical black-polished ware, with impressed decoration, both real spirals and concentric circles, with a filling

<sup>1</sup> Dümmler, *Mittheilungen von den griechischen Inseln*, Beilage 2, Cl, Ath. Mitt. XI, 1886, p. 16; reprinted in his *Kleine Schriften III*, p. 43, with improved drawing.

<sup>2</sup> Sjövall, *Zur Bedeutung der altkretischen Horns of Consecration*, *Archiv f. Religionswissenschaft* XXIII (1925), p. 185 ff.

<sup>3</sup> Nilsson, *The Minoan-Mycenaean religion*, p. 156, objects to Sjövall »that no fire-dogs are found in secular use in the Early Minoan or Neolithic ages of Crete». But the Mochlos horns themselves belong to a collection of objects which is certainly interpreted as a votive deposit — surely chiefly on account of the horns — but which also contains coarse vases, spoons etc., more fit for simple, ordinary use. Cf. Seager, *Mochlos*, figs. 48, 31, and p. 93; Evans, *Palace of Minos I*, p. 57, fig. 16.

<sup>4</sup> Cf. Müller, *Tiryns III*, p. 85 f.



of tangents and with remains of an original white filling left in the cavities. Exactly the same mixture of spirals and circles is met with in the Cyclades.<sup>1</sup>



Fig. 171. Cycladic sherd from E. H. III layer.

These Cycladic sherds in the pure E. H. III deposit are of the very greatest importance for determining the comparative chronology. It is besides, worth mentioning that — as well as these Black Polished sherds, Red Polished ones have also been found, with a strong red slip of a kind that is not identical with the Red Slip ware from the Greek mainland, such as it is represented at Asine, but is, on the other hand, found in the Cyclades.

## MISCELLANEOUS FINDS

### A. Seals and seal-impressions

1. Button-seal (fig. 172: 1). H. 0.01 m, d. of face 0.019 m. From the E. H. deposit on the acropolis close to the Geometric House. Porphyry (?). Horizontal string-hole through the upper curved part showing traces of severe wear, as does the surface of the seal itself. The face bears a kind of labyrinthine pattern with parallel horizontal and vertical lines, but a segment occupying approximately one-fourth of the circumference is filled with concentric arcs. A longer line divides the representation into two different-sized parts, without, however, reaching the outer rim of the seal. The design is without any near analogies in Aegean culture, but has, on the other hand, exact counterparts in Egypt. Here is reproduced a seal from Mahâsna (fig. 172: 2), found in a tomb, M 417, by Reisner entered under a group of »obscure designs, related to pair-figure designs», belonging to the period immediately succeeding Dyn. V.<sup>2</sup> I do not hesitate to interpret in our seal an imported object from Egypt, probably with Crete as an intermediary. Sir Arthur Evans' views on the derivation of the »Double sickle» and allied types on Cretan seal stones from Egyptian button-seals of the VIth Dynasty, strongly support this interpretation<sup>3</sup> — the similarities have recently been explained, by Reisner, as »too simple and too vague to justify any serious conclusion».<sup>4</sup> — As regards the shape, the reader may be reminded of the peculiar button-seal which Blegen found at Zygouries, p. 189, likewise of Early Helladic date, but made of clay. Even in this case it is quite permis-

<sup>1</sup> Tsountas, *Κυκλαδικά* II, Eph. Arch. 1899, col. 87 f.

<sup>2</sup> Reisner, *A provincial Cemetery of the Pyramid age, Naga-ed-Dêr, Part III*, University of California Egyptian Archaeology, Vol. VI, Oxford 1932, p. 118 and fig. 48, No. 27.

<sup>3</sup> Evans, *Scripta Minoa* I, p. 127 and fig. 65.

<sup>4</sup> Reisner, *op. cit.*, p. 120.



Fig. 172. E. H. III (1—8) and M. H. I (9) seals and seal-impressions.

sible to see Egyptian influence, and to connect the division into four with its »symbols» with that of the Egyptian »cruciform patterns» with various filling ornaments in the angles; cf. e. g. Reisner, *op. cit.*, p. 113. Blegen's symbols appear almost as linear degenerations of hieroglyphics, that is if they are considered inversely, cf. Evans, *Scripta Minoa I*, p. 114. The effect of the whole composition may also be compared with a seal from Hagia Triada, in Matz, *Frühkretische Siegel*, Taf. XI, 1 (K. 123), but here there is a »Dreipass» adapted to the shape of the seal, a triangular pyramid, instead of the cross on the round button-seal.

2. Seal (fig. 172: 3). H. 0.024 m, d. of face 0.018 m. From the acropolis, accumulation of E. H. sherds near the eastern side of the »Polygonal Wall Terrace». Steatite. It is conical in shape, with two circular grooves, of which one is just below the top, the other above the engraved base. The upper groove is undoubtedly intended for a string and is thus a substitute for the otherwise customary hole drilled through the top. The shape is, as far as I am aware, unique, and the cutting very roughly done. The face of the seal itself is somewhat rounded and bears a rather roughly made representation of, as it seems to me, the heightened stem of a ship with some of the rigging, and possibly also of a fish beside the boat.

The motive is found in Crete on stamp-seals, steatite prisms, and script seals.<sup>1</sup> It then passes into Linear script, where it is met with in a similar form in Linear A.<sup>2</sup> The Mesará seal is far better made than the Asine seal, and shows a whole ship with some fishes at the side. From the peculiar shape of this seal, the grooves, and the rough workmanship of the representation, one might be tempted to think of it as native work under Cretan influence, but in any case the raw material, steatite, was imported from Crete.

3. Seal-blank (fig. 172: 4). H. 0.027 m, d. 0.023 m From the acropolis accumulation of E. H. sherds near the eastern side of the »Polygonal Wall Terrace». Serpentine. The upper, cylindrical part is pierced by string-holes, but when it was desired to cut the seal itself, the stone broke and no design was ever carried out. The shape is well known from Crete, where pear-shaped signets in ivory, steatite, and rock crystal occur chiefly during E. M. times,<sup>3</sup> but a similar shape is also found in the Hittite group of seals.<sup>4</sup>

4. Impression (fig. 172: 5). Fragment of fairly rough, slightly fired terracotta; light red. From the accumulation of E. H. sherds on the »Polygonal Wall Terrace», east side. Two whole impressions and parts of two others are preserved. The seal was round in shape, d. of face about 0.03 m. In the centre is a large spider surrounded by a meander which follows the circumference of the seal. The back of the lump

<sup>1</sup> Cf. Matz, *Frühkretische Siegel*, p. 123 ff.

<sup>2</sup> Cf. Evans, *Scripta Minoa I*, pp. 203, 225; *The Palace of Minos I*, 118 No. 7 (= Xanthoudides, *Vaulted Tombs of Mesará*, Pl. XIV, 1079), p. 120, fig. 9 b, p. 643, sign 57, *passim*; *Palace of Minos II*, p. 239 ff.

<sup>3</sup> Cf. Evans, *Scripta Minoa I*, p. 120; Matz, *Frühkretische Siegel*, p. 102.

<sup>4</sup> Cf. Matz, *op. cit.*, p. 66 ff.



of clay shows the impression of two round wooden slats, placed at right angles to each other, probably parts of a bolt. Clay was placed over the bolt and with a seal was impressed in the clay before the latter had dried, so as to seal the entrance or opening. The fact that this lump of clay, like a later one, had been baked was due to an accident, the destruction by fire of the house in which it was found, the clay being fired on that occasion.

The design on the seal is undoubtedly Cretan. The spider occurs not infrequently on Minoan seals belonging to E. M. times or possibly to the beginning of M. M. I a, both on ivory seals and on triangular steatite seals.<sup>1</sup> Evans has justly drawn attention to the circumstance that the spider does not occur on engraved stones and coins from the Classical period in Greece, though representations of other insects are fairly numerous. He reminds us that the spider in Greek mythology is met with in the story of Arachne, where it represents the textile art in Lydia. »The undoubted affinities between the earlier indigenous elements of Crete and those of Western Asia Minor make the prominence of the spider in its primitive pictographs the more suggestive, and we may infer that here, too, the insect as a symbol indicated the possession of looms.»<sup>2</sup> One may, perhaps, be justified in concluding that the seal had been placed on a package of fabric imported from Crete.

The meander which surrounds the spider also indicates the Cretan origin of our seal. It often has a more or less curvilinear character, cf. e. g. an ivory seal from a tholos-tomb in the neighbourhood of Hagia Triada, of E. M. III date.<sup>3</sup> With the later development on the mainland may be compared the find of two large lenticular beads of green faience, one of which has a rounded meander ornament of pre-Mycenaean style, in a cist cut into the early round building at Tiryns.<sup>4</sup>

The arrangement of the representations on the impression reminds one first of all of some ivory seals from Platanos.<sup>5</sup> But the impression from Asine, with its sure composition, betrays a purer taste than the somewhat over-loaded Platanos seal, where, for example we have several spiders surrounded not by a meander, but by a row of animals walking one behind the other round the edge of the circle.

5. Impression. Fragments of well levigated terracotta (fig. 172:6); reddish-brown. From the accumulation of E. H. sherds on the eastern side of the »Polygonal Wall Terrace». One almost complete and one part of a damaged impression. The seal was round in shape, d. of face 0.025 m. The design at first sight gives the impression of being a labyrinth, but closer analysis shows that in reality it is a »Dreipass», a triskelion

<sup>1</sup> Cf. Matz, op. cit., p. 121; Evans, Further discoveries of Cretan and Aegean script, JHS, XVII, 1897, p. 332 f. with Lybian and proto-Egyptian equivalents; Scripta Minoa I, p. 212; Xanthoudides, Eph. Arch., 1907, p. 105; Vaulted Tombs of Mesará, p. 112 and Pl. XIII.

<sup>2</sup> Evans, Scripta Minoa I, p. 212.

<sup>3</sup> Cf. Halbherr, Memorie del r. ist. Lomb., XXI, 1904, Pl. X, figs. 25, 26; Evans, Scripta Minoa I, p. 126 f.; Palace of Minos I, p. 121 f., 357 ff.

<sup>4</sup> Cf. Müller, Ath. Mitt. XXXVIII, 1913, p. 85.

<sup>5</sup> Cf. Xanthoudides, Vaulted Tombs of Mesará, p. 112 f., Pl. XIII; Matz, op. cit., Taf. I, Nos. 5, 6 a, 7 a, Taf. II Nos. 2, 4 a.

with three curvilinear hooks. The back of the fragment bears an impression of the mouth of a vase that had been closed with a wooden plug — the wooden fibres left clear traces in the clay. The fragment thus shows how vases were sealed for transport over long distances: a wooden plug was inserted in the mouth and clay was smeared over the rim of the vase and the plug, which nevertheless had not in this case been altogether covered. In the still soft clay seal-impressions were made. By so doing two advantages were gained, first the vase was more thoroughly closed than merely with the wooden plug, and secondly — and I believe this was the main thing — the plug could not be withdrawn without damaging the unfired clay, which broke easily, and, consequently, also the seal, which thus guaranteed that the addressee received the original contents.<sup>1</sup>

The design has many affinities in Crete, where meander, labyrinth, and triskelion are amongst the commonest representations during the Early Minoan period.<sup>2</sup> Furthermore, a kindred labyrinthine impression appears on an E. H. shallow bowl found at Zygouries, p. 107 and fig. 91, 1.

Our impression is undoubtedly derived from a Cretan seal, belonging to E. M. III, and was probably affixed to a vase imported from Crete, on its clay plug, which had then been baked by some accident like the preceding one.

6. Impressions. Fragments of poorly cleansed, unfired clay (fig. 172: 7). From Room I, House R, on Terrace III. Five complete or more or less worn impressions and fragments of some further ones. The seal was round in shape, d. of face 0.018 m. The representation shows a triquestre of S-scrolls, with double chevron on one side, inserted as filling. Together with the fragments with impressions were found a large number of other fragments of clay lining, which had clearly once upon a time covered a plaited basket (fig. 172: 8), those with impressions having been on the lid. The impressions of the bottom of the basket remind one of some of those which are met with on the bases of vases — obviously a plaited basket-bottom occasionally served as a kind of potter's wheel (cf. p. 229).

The representation of the seal has a near parallel on a pear-shaped steatite seal from Central Crete, which nevertheless has smaller spirals and three small triangles interposed between the spirals at the rim, instead of the double chevron on our seal between only two.<sup>3</sup> Our seal-impression from Asine seems to be somewhat freer in composition and more developed, but that in this case also the seal used was of E. M. date seems to be beyond doubt.

<sup>1</sup> A similar process was used during Mycenaean times, as fragments from the English excavations at the Menelaion, close to Sparta, show, cf. Dawkins, *BSA* XVI, 1909–1910, p. 9 ff., and was still in use in the 2nd cent. A. D. in Egypt; cf. Walters, *ib.*, p. 290 f.; cf. also Persson, *Quelques sceaux et empreintes des sceaux d'Asiné*, in *Bulletin de la Société royale des Lettres de Lund*, 1923–1924, p. 165 f.

<sup>2</sup> Cf. Evans, *Palace of Minos* I, p. 121 f., 357 f.; Matz, *op. cit.*, p. 134 f.; Xanthoudides, *Eph. Arch.*, 1907, p. 150, Pl. VI, No. 7.

<sup>3</sup> Cf. Evans, *Scripta Minoa* I, p. 121, fig. 54; Matz, *op. cit.*, No. 171, Pl. IX, No. 29, and now dealt with in detail in Evans, *Palace of Minos* II, p. 197, fig. 106.

7. Impressions. On the shoulder of an E. H. III jar, found in Room I in House R. Round shape, d. of face 0.026 m. — Swastika with hooks of double loops of bands running to the left, the hooks joining the circumference of the seal and with a rounded apex. The seal has been used for decoration in the same way as stamps with spirals and concentric circles, which are most common in the Cyclades. In a similar manner also on the shallow bowl from Zygouries, p. 106, fig. 91, No. 1, which has been already mentioned. In this case, too, a Minoan seal had certainly been used, though I do not know of an exact parallel to it. As to the swastika on Minoan seals, compare Matz, *op. cit.*, p. 134, and Evans, *Palace of Minos II*, p. 197.

8. Seal (fig. 172: 9). H. 0.035 m, d. of face 0.018 m. Found on Terrace IV; earliest Middle Helladic. High cylindrical shape with a slight bulge in the middle and tapering upwards, with horizontal string-hole through upper part. Greyish-black clay. Round the middle of the cylinder run two incised lines, below them are seen two rows of crosses, the arms of the upper one more equal, the lower one with longer vertical arms, double crosses, etc. The face is covered with small, short dashes, placed radially along the edge and strewn about at random inside, as well as with irregular impressions made without any order over the entire surface. The shape is that of a cylinder, with partly decorated sides, adopted from the cylinder seal proper, and, moreover, it is decorated on the base like a stamp-seal. As Matz has shown, the cylinder seal is a stranger to Crete — only a couple of acknowledged imitations exist, the others are importations and come from Late Minoan and Late Helladic finds. Our specimen belongs to that group of clay seals which are represented in the II—V cities at Troy, to which may be added one from Bos-öyük, and another of serpentine from Stratum II at Alishar-Hüyük. In form it approaches nearest to the last and the two cylinders of clay from Troy, depicted by Matz, *op. cit.*, p. 256, fig. 112, Nos. 7 and 9, Schliemann, *Ilios*, p. 463, fig. 499. Matz points out, with regard to the Trojan clay-seals, that they show northern influence; not only the fact that they are made of clay, but also that the decoration is purely linear and that figurative motives are lacking, indicate their connection with the Balkans.

This seal of Balkan type found at Asine with exact counterparts in the II—V strata at Troy, is of importance as a contribution to our understanding of the first Aryan immigration. We shall revert to this in Conclusions.

#### B. *Pendant or amulet*

In the large bothros on the »pre-Mycenaean Terrace» with the previously described E. H. III vases in the very middle of the smashed vessels, a pendant or amulet of black steatite was found, h. 0.033 m, with string-hole 0.043 m, w. 0.032 m, thickness 0.009 m (fig. 173). Above the square plaque is a projection 0.012 m long, rounded at the top and pierced longitudinally, and showing a good deal of wear. All sides of the stone are decorated, with the exception of that with the projection. On the front



fig. a, are four interlaced spirals of a type which is common both in Crete and in the Cyclades. The nearest Cretan parallel is a small stone vessel from Tholos B at Platanos, but there we find continuous interlacing triple spirals in two connected rows,<sup>1</sup> on our amulet only double spirals, since no more were required for them all to be joined together. The same interlaced spirals are found on the well-known stone pyxides of Melos and Amorgos.<sup>2</sup> A similar spiral ornament with only four loops appears on a steatite seal from Hagios Onuphrios,<sup>3</sup> and the strongest parallel is presented by a steatite ring from Crete, now in the National Museum at Copenhagen.<sup>4</sup> Unfortunately, no information is available as to the circumstances of its discovery. The spirals, which are not quite so developed as in our amulet are joined to each other in precisely the same way.

The decoration of the remaining sides is carried out in typical »Kerbschnitt«. Fig. b with its characteristic incisions forming two touching semicircles placed vertically and, twice repeated, reminds one of the pattern on an ivory seal from Platanos.<sup>5</sup> I know of no decorative ensemble analogous to fig. c, but the technique is the same as on fig. d, where the same work is found as on the rim of a pyxis lid of greenish marble from Amorgos.<sup>6</sup> Fig. e shows the well-known herring-bone pattern, which is found, inter alia, on vases with incised ornament even during the neolithic period.<sup>7</sup> The impression created by the decorated narrow sides reminds one of the elongated ivory seal with step-meander from Kalathianá in Crete.<sup>8</sup> A similar steatite object with broken-off string-hole projection, h. 0.022 m, w. 0.023 m, th. 0.012 m, was found as a surface find at Midea-Dendra, and is now in the Museum at Nauplia (fig. 174). The patterns are very much worn but the carving is clearly visible; the front is divided by a vertical line into two fields, each one filled with parallel, vertical zig-zags with the angles filled in.

The question as to whether we have here to do simply with pendants or with amulets I am inclined to answer in favour of the former alternative. Of course, amulets did occur during E. M. times in Crete, but, as far as I am aware, they all bear figurative scenes and are more or less clearly under Egyptian influence.<sup>9</sup> A kind of amulet or magic token is certainly found in Anatolia, but there, too, animals or objects

<sup>1</sup> Xanthoudides, *Vaulted Tombs at Mesará*, p. 102, Pl. XI, 1904 a, and Evans, *Palace of Minos II*, p. 193 f.

<sup>2</sup> Cf. for example Montelius, *Grèce préclassique I*, Pl. 43.

<sup>3</sup> Matz, *op. cit.*, Taf. X, No. 8 (K 130).

<sup>4</sup> Blinkenberg, *Antiquités prémycéniennes*, p. 41, fig. 12, in *Mémoires de la Société royale des antiquaires du Nord*, 1896.

<sup>5</sup> Xanthoudides, *Vaulted Tombs of Mesará*, Pl. XIV (1079); Matz, *op. cit.*, Taf. VIII, No. 7; Evans, *Palace of Minos I*, p. 118, fig. 87, No. 9.

<sup>6</sup> Cf. Dümmeler, *Mitteilungen von den griechischen Inseln*, Beil. 1 A 4, *Ath. Mitt.*, XI, 1886, p. 18; Montelius, *Grèce préclassique I*, Pl. 43, 8 a.

<sup>7</sup> Cf. e. g. Montelius, *Grèce préclassique I*, Pl. 46, No. 34.

<sup>8</sup> Xanthoudides, *Vaulted Tombs*, p. 83, Pl. VIII (821); Matz, *op. cit.*, Taf. VI, No. 12.

<sup>9</sup> The best known is the small golden heart with a scorpion, serpent, and spider from a tomb at Hagia Triada; cf. Paribeni, *Sepolcro di Hagia Triada*, in *Monumenti Antichi*, XIV, 1905, p. 64 ff. Other amulets in human or animal shape in Xanthoudides, *Vaulted Tombs*, see Index, s. v. Objects found.

are represented.<sup>1</sup> The amulet is indebted for either to its magic power material itself or to the signs it bears. This magic power can hardly be ascribed to steatite, and the signs and tokens it bears can hardly have any such attributed to them; if it were, it would then be to the interlaced spiral as a symbol of infinity — a sign



Fig. 173. E. M. steatite pendant.

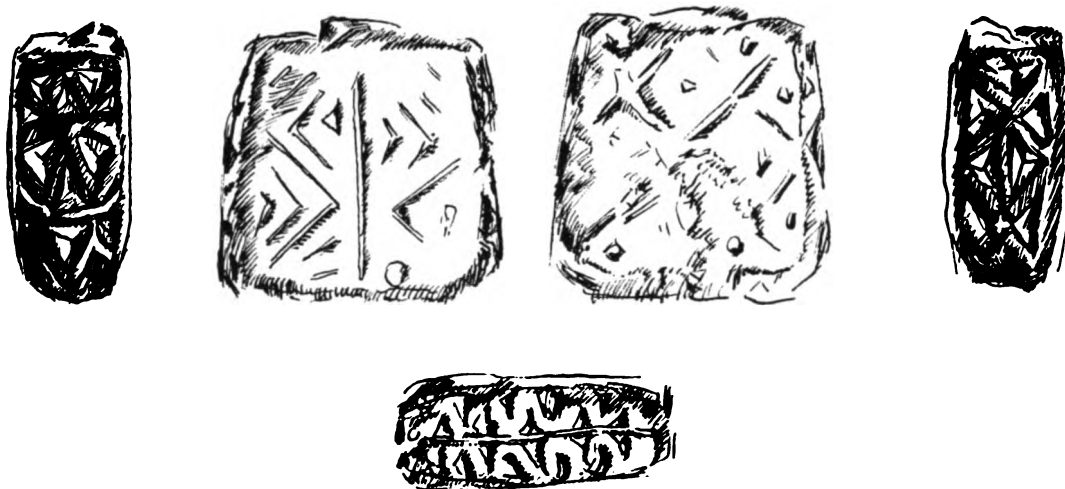


Fig. 174. E. M. steatite pendant from Dendra.

which would then be placed beside the cross and the circle in later ages; one would then also be forced to impart a sacral meaning to the zig-zag lines on the Dendra pendant.<sup>2</sup>

<sup>1</sup> Cf. Schmidt, Alishar-Hüyük, Seasons of 1928 and 1929, Index s. v. Magic.

<sup>2</sup> In my first publication of the object here referred to, I came to another conclusion, since I attributed to the pair of horns (before p. 233) found in the same bothros a purely sacral character; cf. Bulletin de la Société royale des Lettres de Lund, 1923—1924, p. 170.

As to the origin of the pendant, we find first of all that the material, steatite, is a Cretan stone. The decoration, on the other hand, points to the Cyclades, where marble is often found worked in the same manner, but the same technique is not unknown in Crete, as is shown by the parallels quoted. The numerous steatite vases that have been found on Melos during the excavations at Phylakopi, were considered by the English to have come from Crete.<sup>1</sup> Thus, it seems as if the reasons for referring our pendant to the Cyclades are hardly sufficient, even if it is beyond all doubt that close intercourse did exist between the Greek mainland and the Cyclades during Early Helladic times. I therefore conclude that our pendant, found together with Early Helladic pottery, belongs to the Early Minoan period.<sup>2</sup>

### C. *Stone implements and Weapons*

A comparatively large number of stone objects have been found at Asine, considering the circumstance that the existence of neolithic deposit could nowhere be proved. It might, however, be calculated to cause astonishment, if we had not gradually discovered that stone had by no means been altogether replaced and ousted by bronze neither for implements nor for weapons. The shapes illustrated below probably also belong on the whole to the Bronze Age, but it is difficult to fix any precise period, because only few of them were found in closed, datable find-complexes, the bulk of them as loose finds in various strata. It is not possible therefore to differentiate between the different periods of the Bronze Age, and I have consequently preferred to deal with all stone objects together, giving the information in each separate case as to the circumstances in which the find was made. Obsidian objects are first dealt with, and secondly objects made of some other kind of stone.

### OBSIDIAN

Some flakes of obsidian, clearly datable to the E. H. period, have been found in an E. H. III child's tomb on the so-called »pre-Mycenaean Terrace», cf. above p. 42. Knives of exactly the same type were found in all the Bronze-Age strata. The fact that it is impossible to outline any development is due to the manner of their manufacture.<sup>3</sup> It is, I think, beyond doubt that the obsidian is Melian. But the number of waste chips and nuclei or cores found goes to prove that the obsidian was, at least in part, worked on the spot. Both types of core were found, those from which flakes had been chipped on all sides and those worked only on one side, which thus have the reverse side only roughly prepared. These nuclei or cores (fig. 175: 1) are small, and therefore the maximum number of flakes has been taken from them, which was only to be expected if the blocks had been imported and the manufacture of implements

<sup>1</sup> Cf. Mackenzie, BSA IV, 1897—1898, p. 34 and Bosanquet-Welch, Excavations at Phylakopi in Melos, p. 196.

<sup>2</sup> Cf. the more detailed discussion, Bulletin de la Société royale des Lettres de Lund, 1923—1924, p. 170 f.

<sup>3</sup> Dealt with in detail in Blinkenberg, Griechische Steingeräte, in Archaeologische Studien, p. 5 ff.



took place at Asine. Amongst the knives were found, both inner flakes, and others with at least one edge originating from the outside of the roughly trimmed core, i. e. struck from cores worked only on one side (fig. 175: 3). Such exterior flakes occasionally show a kind of serration, which may lead one to think erroneously that they were intended for saws, but no whole obsidian saw has been found, only flint saws (fig. 175: 2).

Many of the larger waste flakes were used as scrapers, and in some instances certainly had been worked over and turned into arrow-heads. The latter are, in fact, often flat or even concave on one side, whereas the other side is convex, and sometimes bears traces of the typical white crust formed by the soil surrounding the melted lump.

It seems as if the arrow-heads at Asine (fig. 175: 4) had developed from a relatively short, broad type, with long barbs and curved sides, to a somewhat narrower one, with straight sides during the M. H. period which persists with shorter barbs into L. H. times and constitutes the prototype for the bronze arrow-head common at that time. During the L. H. period the fine type of arrow-head, with curving sides and much reduced barbs, also occurred. As the material available at Asine is rather limited, these observations need, of course, to be supplemented from other quarters, but the material from both Zygouries and Eutresis fits into the scheme here promulgated.

At Asine, flint and chert were also used to some extent for the smaller edged tools and saws. Here, as at Zygouries, the greater number of flint implements consists, however, of shapeless bits, and Blegen's assumption that they »were used for striking sparks to light a fire»<sup>1</sup> seems to me »einleuchtend».

#### STONE

1. Small vessel found in the E. H. accumulation on the eastern side of the »Polygonal Wall Terrace». H. 0.019 m, d. 0.058 m. — Greenish-grey stone. Spherical shape, with flat base and a small projection on one side. The upper edge is unfortunately damaged but it is highly probable that we have, here, the lower part of a bowl-shaped ladle of the type common in Crete during the Early Minoan period, e. g. those found in large numbers by Xanthoudides in tombs at Koumása and Porti in the Mesará.<sup>2</sup>

2. Fragment of a small vessel found at the same place. Length preserved 0.035 m. — Black steatite. Piece of a shallow bowl with slightly convex sides. It has two lines cut in the rim. This vase, too, was probably of Cretan origin, and is most nearly comparable with other stone vases<sup>3</sup> found by Xanthoudides at the places already mentioned.

3. Nine small pestles (fig. 175: 5), two of which were found on the »Polygonal Wall Terrace», four in or close to House R, on Terrace III, and three in the Lower

<sup>1</sup> Zygouries, p. 199.

<sup>2</sup> Cf. Xanthoudides, Vaulted Tombs, p. 19, Pl. XXII; p. 64, Pl. XXXVIII.

<sup>3</sup> Cf. Xanthoudides, op. cit., Pl. XXII, Nos. 734—736.

Town proper. They differ from each other rather considerably in size and appearance, and are sometimes rounded and sometimes flat at the ends; h. 0.025 m to 0.048 m, d. 0.015 m to 0.028 m. The material varies from white marble to blueish-black stone, often veined. Objects of this kind have been found in all E. H. settlements and in the Cyclades.<sup>1</sup> That they were used in the Cyclades for grinding colour, probably for tattooing, is made more probable by the fact that they are, there, generally found together with cosmetic palettes.<sup>2</sup>

4. A comparatively large number of stone axes and fragments of such have been found in different places, representing three different types (fig. 175: 6), one long and narrow type, one short and broad, both without sockets, as well as a bored type.

The first type has a pointed base and equally curved sides, so that the cross section is oval in shape, relatively thick in proportion to the width. Three whole and two unfinished specimens of this type have been found.

a) Axe with pointed base, of greenish stone; polished. Length 0.15 m, w. 0.075 m, th. 0.035 m. Found in the Lower Town, in a Hellenistic stratum.

b) Axe with pointed base, of greenish stone; polished. L. 0.05 m, w. 0.055 m, th. 0.027 m. Found in a field in the village of Tolon, about 15 minutes walk from the place of excavation.

c) Axe with pointed base of haematite ore;<sup>3</sup> polished. L. 0.08 m, w. 0.045 m, th. 0.027 m. Found in a Late Mycenaean find complex close to a sacrificial bench or altar in Room XXXII of House G.

d) Axe, unfinished; basalt, spoiled while being worked in that a large piece had cracked off on the back; unpolished. L. 0.165 m, w. 0.065 m. The sides were left still somewhat parallel and the edge blunt. Found in the Middle Helladic stratum on Terrace III, to the north, quite close to Tomb M. H. 74.

e) Axe, unfinished, of grey stone, not worked down to a sharp cutting edge, roughly polished. L. 0.07 m, w. 0.048 m, th. 0.02 m. Late Helladic stratum, Square G 14.

Two fragments with relatively narrow cutting edge and wider body belong probably to the blunt type.

f) Piece of cutting edge of hard blueish, black stone. W. 0.036 m. Found on clearing out the corner tower in the north-west of the Lower Town.

g) Piece of cutting edge of greenish stone; unpolished. Breadth of cutting edge 0.045 m. Found in the Lower Town, west of the Bath, in Mycenaean stratum.

The eye-bored axes are represented by five more or less defective specimens (fig. 157: 7).

<sup>1</sup> Cf. Excavations at Phylakopi, p. 199 ff.; Zygouries, p. 198, and later Goldman, Eutresis, p. 201.

<sup>2</sup> Cf. Tsountas, Eph. Arch. 1899, p. 100.

<sup>3</sup> An analysis made at the Geological-Mineralogical Institute at Uppsala gave the following result: specific gravity = 5.104, about 95 % haematite, about 5 % quartz, some magnetite.



Fig. 175. Implements and tools of obsidian and stone.



h) Bored axe strongly ground at the edge, cracked near the hole, of hard, blueish-black stone; well polished cutting edge. L. 0.09 m, br. 0.06 m, th. 0.042 m. Found on Terrace III in mixed E. H. and M. H. stratum above Bothros 13.

i) Fragment of bored axe of basalt, neck missing, cutting edge broken. Preserved l. 0.06 m, br. 0.052 m, th. 0.04 m. Found in M. H. stratum in Square D 13 of the Lower Town.

j) Fragment of probably unfinished bored axe of greenish stone; base and cutting edge broken off, rounded corners. L. 0.08 m, br. 0.06 m, th. 0.055 m. Found in M. H. stratum in Square L 3 of the Lower Town.

k) Fragment of probably unfinished bored axe of greenish-grey stone; base broken off near lower edge of hole. L. 0.08 m, br. 0.055 m, th. 0.037 m. Found in mixed E. H. and M. H. stratum north part of Terrace III.

l) Fragment of bored axe of polished, hard, blueish-black stone. Only the handle end above the hole preserved. L. 0.035 m, br. 0.053 m, th. 0.053 m. Found in the M. H. stratum in the Lower Town.

The number of bored axes is proportionately large at Asine. It is worth noting that all specimens were found in M. H. connexion. The bored axes from Eutresis are likewise from M. H. strata,<sup>1</sup> and it is quite natural to refer the whole type to the beginning of this period. At Dimini and Sesklo the number of bored axes is strikingly few, and Tsountas points out that they must have come into use much later than the other type.<sup>2</sup> In Asia Minor this type has a long history, with many varying types,<sup>3</sup> and it strikes me as probable that it was thence introduced into Greece; more on this subject in Conclusions. When Miss Goldman says, that the boring »is indifferently placed in the middle or towards one of the ends of the axe-head»,<sup>4</sup> this is due to an error. The hole, as the finished specimens show, was bored in the handle end, but if the cutting edge in use became broken a fresh edge was given to the axe by reworking, and in this way the hole in some instances came to be in the middle.

5. Of the bored mace-head and hammer both the rounded, pear-shaped and the rectangular type, are found.

a) Fragment of pear-shaped stone mace-head; polished marble. D. along hole 0.055 m. Found on Terrace III under Tomb M. H. 59.

b) Fragment of rectangular stone mace or hammer of greenish stone, polished. D. and breadth 0.05 m. Found in the Lower Town in the Geometric stratum.

The round type is the one common in Greece, which is met with at various places in Thessaly.<sup>5</sup> The same type also occurs in Asia Minor, for example at Troy and

<sup>1</sup> Goldman, Eutresis, p. 206 f.

<sup>2</sup> Cf. Tsountas, *Διμίνι και Σέσκλον*, p. 319.

<sup>3</sup> Cf. Blinkenberg, *Archaeologische Studien*, p. 22.

<sup>4</sup> Goldman, Eutresis, p. 207.

<sup>5</sup> Cf. Wace and Thompson, *Prehistoric Thessaly*, s. v. Index *ibid.* Stone club heads.

Alishar-Hüyük.<sup>1</sup> The rectangular fragment may belong to an implement of the same type as is illustrated in Eutresis, fig. 278, No. 6, or may possibly be the handle end of a bored axe.

A large number of drills were found, more than a score, of the same kinds of stone as bored celts, most of them of greenish stone. They vary a good deal in length, from 0.025 to 0.008 m, and their diameter varies likewise. Some are illustrated in our fig. 176: 1, which may give an idea of their appearance. In many cases clear traces of working can be seen, and, as far as it is possible to judge, the borings have been drilled with wet sand. As Götze has shown, drilling with wet sand, which leaves a matt wall, is an advance on drilling with dry sand, which leaves a polished wall; the former process is quicker and also leaves a better fastening for the haft.<sup>2</sup> Götze is of the opinion that drilling with dry sand occurred only in Troy I, and later on always wet sand. This gives further support to the preceding remarks about the dating of the bored axe at Asine to the Middle Helladic period, and it is also worth while in this connection to emphasize the fact that not a single drill has been found in purely Early Helladic strata, whereas twelve have been found in a pure Middle Helladic context. The comparatively small length of the drills clearly shows that, as a rule, drilling was done from both sides. We have, of course, to allow for a later adjustment of the drill-holes with the aid of a round stick and wet sand, and it is therefore impossible to draw any conclusion merely from the smoothness of the boring as to whether it was drilled from only one side or from both. It seems probable that the drills were subsequently used in some way, possibly as plugs in narrow mouths; one shows polishing and an incision round the middle.

6. Over the entire excavation area, and in all strata grindstones were found of the well-known kind with or without transverse grooves, formed by coarse grit. As pestles and pounders, stones of different types were used and pieces of rock. Some of the more regular ones are illustrated here (fig. 176: 2).

a) Oblong cylindrical pounder of hard blueish-black stone, polished. H. 0.095 m, d. 0.055 m. Found on Terrace III, in a M. H. layer.

b) Cylindrical grindstone of greyish stone. H. 0.06 m, d. 0.055 m. Found in the Lower Town, Square K 2.

c) Coarse cylindrical polisher of greenish stone. Very much worn at both ends. Found on the acropolis; surface find.

d) Hemispherical polisher with working on the upper side for the hand and depressions for the fingers on one side; coarse grit; h. 0.065 m, d. 0.085 m. Found on Terrace III, in Middle Helladic stratum.

A certain similarity to some rubbing and pounding stones is shown by a regularly formed stone, found on the top terrace of Mt Barbouna, within the apsidal wall.

<sup>1</sup> Cf. Dörpfeld, *Troja und Ilion I*, pp. 323, 377; Schmidt, *Alishar-Hüyük*, Seasons 1928, 1929, pp. 62, 166.

<sup>2</sup> Cf. Dörpfeld, *Troja und Ilion I*, p. 322; Goldman, *Eutresis*, p. 207, has been guilty of an error.

It is a slightly convex cone of white marble, h. 0.13 m, d. at base 0.085 m, with polished surface (fig. 176: 3). A similar one, but with slighter proportions, was found by Miss Goldman at Eutresis, at the level of the last Early Helladic phase (p. 202), and she points out its similarity to a baetyl stone. She mentions one or two others, one in the Chaeronea Museum from Drakhmani, another in the room of bronzes, National Museum, Athens. The assumption that these are perhaps baetyl stones, may find support from the fact that the stone at Asine was found on the top of the mountain, which at a later period was crowned by a small shrine. In the vicinity was found a small Apollo statuette of lead<sup>1</sup> — is the marble cone a small omphalos?

To the stone implements belong also the sandstones, of which several have been found and only a few specimens are reproduced here. First, a peculiar, small implement of coarse sandstone, elongated, semi-ovoid, with a groove in the middle, l. 0.105 m, br. 0.035 m, d. 0.035 m, found on Terrace III, to the north, in a mixed M. H. and E. H. stratum. It has its exact counterpart in a find from Troy, Dörpfeld, *Troja und Ilion*, p. 388, fig. 368. It reminds one to a certain degree of a sharpener for arrow-heads, but the evenly formed groove running right through is not of the same kind as those on real sharpeners for arrow-heads, cf. fig. 176: 4. The object may have been used for polishing round pieces of wood, e. g. arrow-shafts and the like. They were put together in pairs, facing one another, and the wood was rubbed up and down the groove until it was reduced to the requisite size. In western Greece they have been found at Leucas, at Malthi, in Messenia, and at Asea, in Arcadia. They are met with in the same shape in the band-pottery culture at Tordosch, in Transylvania, at Monsheim and Worms, and at the latter place in pairs.<sup>2</sup> In Spain too they occur in finds from the earliest metal ages.<sup>3</sup> In the East only one similar object has so far been found, namely at Melos.<sup>4</sup>

The find is of importance for the question of the spread of Middle Helladic culture, and we shall revert to this in the Conclusions.

It seems as if we had fragments of another similar implement (fig. 176: 5) of blueish-black stone, l. 0.06 m, br. 0.05 m, broken off at the back. However, the groove here is more even and it may be a sharpener for arrow-heads. It is certain that this is the case with a piece of micaceous slate, l. 0.063 m, br. 0.02 m, thickness 0.02 m.

Small, flat grindstones of different sizes, with or without holes, made from slate, are not rare; two are illustrated here, the larger from House T on Terrace III, l. 0.09 m, br. 0.03 m, the smaller from a mixed M. H. and Mycenaean stratum in the Lower Town, l. 0.05 m, br. 0.028 m. A grindstone of quite another type is the long one

<sup>1</sup> Cf. below p. 333.

<sup>2</sup> Lindenschmit, *Die Altertümer unserer heidnischen Vorzeit*, Bd. II, Hft 8, Taf. I, fig. 2; Köhl, *Neue prähistorische Funde aus Worms*, p. 66.

<sup>3</sup> Siret, *Les premiers âges du métal dans le Sud-Est de l'Espagne*, Taf. III, fig. 38.

<sup>4</sup> Excavations at Phylakopi in Melos, p. 199.





Fig. 176. Implements and tools of stone.

tapering towards one end, also of slate, which is reproduced in fig. 176: 6, l. 0.205 m, br. 0.035 m. Here the ridges have become sharpened through use.

Chipping-stones used in the making of stone implements, and as hammers, are also met with in large numbers; here are reproduced only three of the different types, flat oval, round, elongated (fig. 176: 7), whose use may be clearly seen from the flakes chipped off at the ends. They are ordinary, selected stones, white limestone, hard blueish-black stone, which have not been subjected to any special working.

Finally, small polishing stones, are also found which were certainly used in the manufacture of pottery for polishing the surface, and for attaching the handles and the like (fig. 176: 8). They have worn edges and are as a rule of soft rock, chiefly slate. Type *a* of micaceous slate l. 0.11 m, br. 0.03 m, was found in the E. H. accumulation on the »Polygonal Wall Terrace»; worn at both ends. Type *b* of black slate

l. 0.09 m, br. 0.042 m, found in a M. H. stratum in the Lower Town, worn on the curved edge. Type *c* is a naturally formed piece of dark stone worn on both sides of one end, l. 0.06 m, br. 0.01 m. This was found in a bothros in House T on Terrace III. As well as the stones suitable potsherds were also used for the same purpose, e. g. a M. H. piece of a handle, l. 0.07 m, br. 0.017 m, found in a M. H. stratum in the Lower Town.

Blueish stone, l. 0.086 m, br. 0.051 m, very much worn on lower edge. This may perhaps have been made from an axe-head with pointed base, cleft lengthwise.

A single mould has been found in a Mycenaean stratum in House G. This is made of light soapstone, l. 0.06 m, d. 0.35 m. The two halves fit together very closely and are provided with notches at the edge for proper fitting, and safe tying when in use. It may have been intended for the casting of pins.

The whorls or buttons of stone from Asine are, in the older strata, few in number and will be considered together with those of clay, because their shapes are identical.

Further mention shall only be made here of a pin-head of white limestone or marble with a piece of the bronze still preserved. Globular shape, d. 0.023 m; found in the M. H. stratum in the Lower Town. As far as I know, actual parallels to this find have only been made in Asia Minor, cf. e. g. Alishar-Hüyük, Seasons 1928 and 1929, p. 162, where some small pins of the same kind with glazed bead heads had been found in Stratum II. Probably some of the round, so-called whorls, had a similar use, and the bronze pins found in the Middle Helladic stratum at Eutresis, p. 217, fig. 288, 3—7, and there termed «awls», had certainly been similar pins with heads, particularly Nos. 6 and 7.

#### D. Clay

The smaller clay objects which occur in the older strata are mostly concerned with the preparation of fabric, woven fabrics, spun fabrics, and the like. I believe that a peculiar object, found in the E. H. III stratum in Square G 14 should also be included in this category (fig. 177: 1—2). H. 0.075 m, breadth of middle piece 0.055 m. From the body, pierced by four holes, issue two arms, one of which is missing. Similar objects, with or without holes — they pass under the name of Anchor ornaments — have been found in Thessaly; cf. Wace and Thompson, *Prehistoric Thessaly*, see Index; Objects, Miscellaneous; Terra-cotta; Anchor ornaments. From Eutresis also, there are a few such, p. 196 and fig. 269, 1 and 3, and specimen from Sotiriades' excavations in Phokis *Rév. Et. Gr.* 1912, p. 257, fig. 4; *Eph. Arch.*, 1908, p. 93. Miss Goldman calls them Anchor ornaments or amulets. They may have been used for weaving. The threads could be drawn through the relatively large and worn holes, when two, three or more threads could easily be twined together. It may of course be objected that terracotta is a poor material for this purpose, but, on the other hand, the pieces are quite roughly made. A more durable material, such as stone, might also easily have broken the

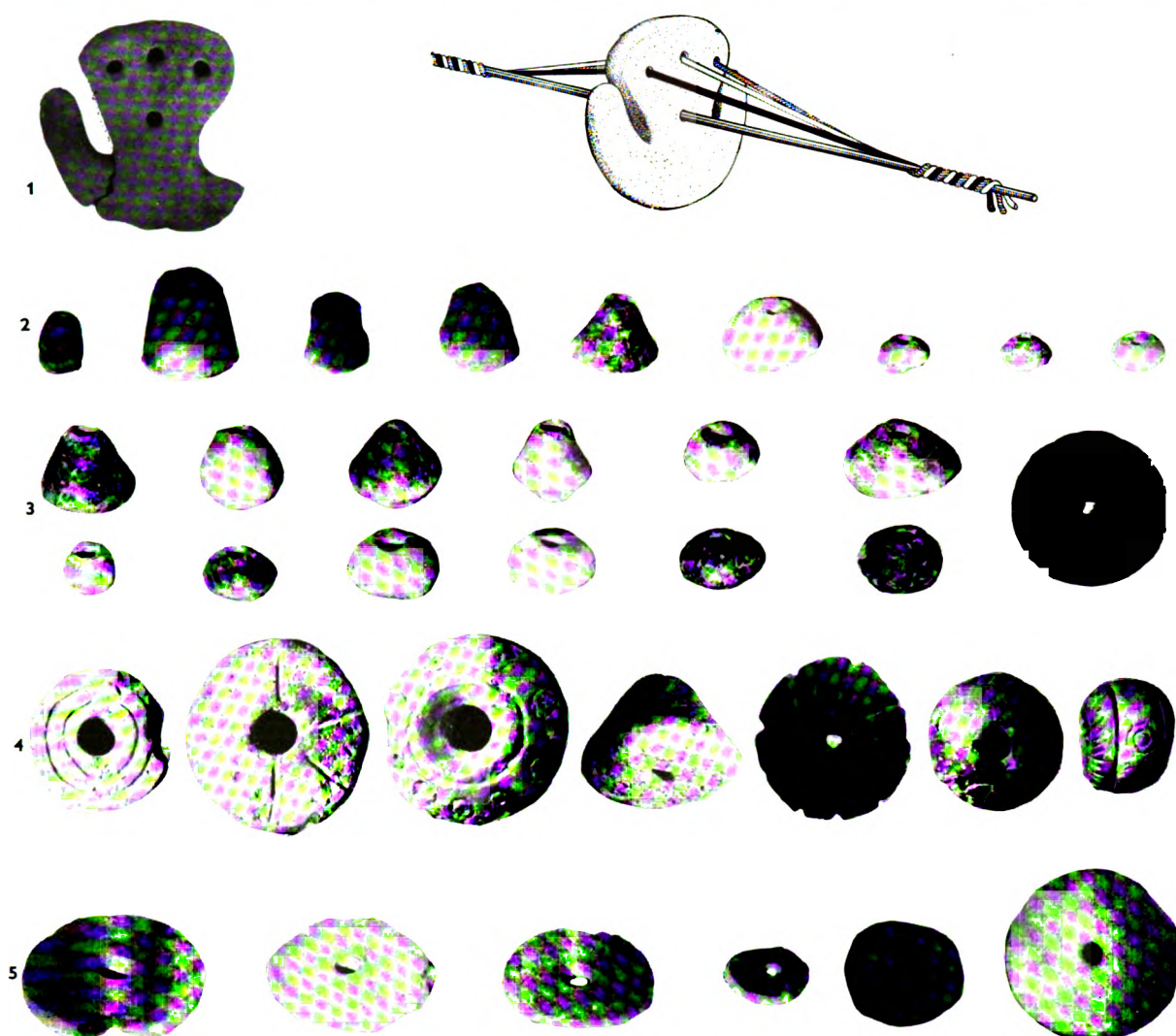


Fig. 177. Objects of clay.

threads. I emphasize that the explanation given is sheer guesswork, due to my disinclination to attribute religious significance to the coarse objects, cf. M. Lehmann-Filhés, *Über Brettchenweberei*, Berlin 1901, esp. figs. 27 and 28. To the same group of objects difficult to determine, belong also some E. H. cylinders of terracotta, with double, parallel holes, probably a kind of loom weights. Similar ones are in existence from Korakou, p. 102, fig. 129, Nos. 4 and 5, Zygouries, p. 191, Eutresis, p. 193, fig. 266, Nos. 3, 6.

As regards the ordinary whorls, more than fifty of these in clay have been found, besides some of stone and bone. Here is figured a series, (fig. 177: 3) Middle Helladic, found in tombs and pure strata, (fig. 177: 4) Late Helladic, and in one or two cases Proto-Geometric.



In the Tomb M. H. 90 on Terrace II was found a loom-weight (fig. 177, No. 1) of cylindrical shape, tapering somewhat upwards. H. 0.03 m, d. of base 0.023 m. Polished ware. Two large weights of the same kind (Nos. 2 and 3) come from Wall 11 of House T on Terrace III, h. respectively 0.05 m, 0.035 m, br. respectively 0.06 m, 0.035 m. This type seems to have developed from E. H. weights of the kind reproduced in fig. 177: 5, there with two holes, on others with one.

Another type, that later becomes very common, the pointed cone, was found in Tomb M. H. 23 (fig. 177: 4, No. 5). The flat-bottomed cone with incurved sides is likewise found (Nos. 6—10) and is more common in the M. H. period than the pointed cone. To judge from all appearances, this shape originated in or developed from the circle-segment. No. 6 is a sawn-off ball-joint of bone, h. 0.025 m, d. of base 0.06 m, found on Terrace III in a pure M. H. stratum; No. 7 is a similar one found in the Early Helladic accumulation on the »Polygonal Wall Terrace». In the E. H. deposit at Zygouries exactly similar ones occurred (p. 191 f., fig. 181, Nos. 1—3). They were later imitated in clay and occurred not only in M. H. but also in L. H. times (Nos. 16 and 17 of steatite). An M. H. variant of this (No. 11) has the apex cut off at the top, whereby it becomes still lower.

The L. H. weights have throughout smaller proportions, even if the types are partly the same, the pointed (12) and the domed cone (16). As new forms were added the double-cone, double pointed — which by Schliemann are declared to be typical of the III—V stratum at Troy (13—15 and 23, which is of steatite) and double-domed (19—21). Besides these spherical ones are found (Nos. 18 and 24), which may perhaps have been used as heads of pins. The double-domed weight, No. 21, was found in Tomb P. G. 10.

Some of these weights are decorated and our fig. 177: 5 reproduces a collection of these. No. 1 is a flat sheet of soapstone, decorated with two concentric circles round the hole, found in the Mycenaean stratum in the Lower Town. No. 2 is a pointed cone with five rays issuing from the hole, found in a Mycenaean stratum outside the upper Mycenaean house. No. 3 is likewise a pointed cone with a notch round the string-hole, then a circle concentric with the hole, and between the latter and the outer edge of the base a ring of small circles with a marked centre point. Exactly the same type and decoration are met with in a Trojan one.<sup>1</sup> Our weight was found on Terrace III, to the N., in a mixed M. H. and L. H. stratum rather near the surface.

No. 4 is another pointed cone, the base of which is altogether covered by small circles impressed with a fine tube or straw. Yellow-Minyan, lustrous clay; found in M. H. stratum. No. 5 is a double-domed weight with two small dashes radiating from the hole at both ends, a middle zone, enclosed by two deep circles and on this, four times repeated, two small concentric circles. Found in L. H. III stratum close to House G. No. 6 is a spherical weight with melon-like decoration, found in a L. H.

<sup>1</sup> Schliemann, No., 5180. Cf. Dörpfeld, *Troja und Ilion*, Beil. 48 g.

III stratum in the Lower Town. The most interesting is No. 7, of dark clay with shallow incisions, which obviously, at the lower edge portray a solar disc surrounded by a corona, while the rest of the lines probably represent quadrupeds. This belongs to exactly the same group as the whorls, found in Troy »mit naturalistischen Motiven — am häufigsten sind tierische Darstellungen« (Dörpfeld, *Troja und Ilion*, p. 426 f.).<sup>1</sup> Our weight from Asine was found in a L. H. III stratum in the Lower Town (Square H 10).

Some of the small, flat discs that have been made from all kinds of sherds may perhaps have been put to the same use as weights already dealt with (cf. Eutresis, p. 192). Our figure 177: 6 reproduces some of these, their diameters varying from 0.11 m to 0.045 m. The larger ones may certainly have been also used as lids with fairly thick string through them, knotted on both sides, and have served as substitutes for the wooden plugs. Nos. 1—3 are made of soapstone or flat pieces of slate, and were found in an M. H. stratum on Terrace III.

#### E. Horn and Bone

On the border-line between Middle and Early Helladic was found on Terrace III, firstly a pick-axe of stag-horn, and secondly a horn attachment for a small stone celt (fig. 178: 1). The pick-axe has a length of 0.14 m. Its upper part is pierced by a hole, d. 0.024 m, its lower end had been pured all round and then cut off obliquely, so that it originally had a sharp curved edge; it had been very much blunted by use and a crack from the hole right up to the handle end was clearly also caused by a good deal of forcible use. The horn attachment measures 0.115 m in length. It is the very base of the horn from which two tines and the horn itself have been sawn off, the later by crosswise cuts. The bored hole is approximately in the middle of the horn, and has a diameter of 0.02 m. The sawn-off end of the horn was hollowed out to accommodate a small stonecelt; for its position and hafting, cf. Tsountas, *Διμήνη και Ξέσχαλον*, p. 316 f. By long use the stone celt has made cracks in the horn, one stretching from the bottom right up to the hole. Semi-finished and unworked stag antlers have been found in many places (fig. 178: 2); our fig. 179 shows one in a burnt stratum of Tomb P.G. 24. Such implements of horn are not so rare in Thessaly, cf. Wace and Thompson, *Prehistoric Thessaly*, see Index, s. v. Objects, Miscellaneous, horn. On the other hand, as far as I am aware, they have not been found anywhere else in Greece. Both the bored implements here referred to lay, as already stated, in the oldest M. H. stratum. A closer study of the bored implements from Thessaly shows that they have either been found in purely Thessalian Bronze-Age strata or in the latest Stone Age stratum — here, too, they are relatively late. The older method of hafting stone-celts into stag-horn was quite different; at the opposite end to the celt

<sup>1</sup> Cf. illustrations in the catalogue: Königl. Museen zu Berlin, Heinrich Schliemanns Sammlung Trojanischer Altertümer beschrieben von Hubert Schmidt, Taf. VII, 5232–5252.

a hole was made for inserting a, probably, wooden haft, cf. Tsountas, *Διμήνη καὶ Σέσχαλον*, fig. 241. It is a highly relevant fact that bored stag-horn implements play a large part in the Central and North European culture, cf. Ekholm, *Nordischer Kreis*, in Ebert's *Reallexikon*, Taf. 5. It is probable that the Indo-Europeans who came from the North brought this implement with them, coming from a Stone-Age culture; this could also explain the importance which the stone implements, the bored axes, gained in the Middle Helladic period; we shall revert to this in the Conclusions.

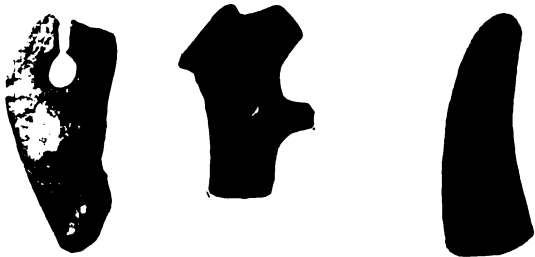


Fig. 178. Objects of horn.



Fig. 179. Stag's horn *in situ*.

Some types characteristic of each period have been arranged in series illustrative of the smaller bone objects. The E. H. types are broad. No. 1 is a spatula or polishing instrument which may be compared with similar implements of stone or clay; it is rather worn at the point (fig. 180: 1). No. 2 (fig. 180: 2), with its broad blade at the top and elongated point, has a shape reminiscent of the Mycenaean bone awl. It was, probably, like the ensuing Nos. 3 and 6, used as a hairpin (fig. 180: 3, 4). Nos. 4 and 5 give the impression of having been articles in real use.

The Middle Helladic period has a far richer repertory of shapes. To this belongs in the first instance a polished handle of bone, l. 0.127 m (fig. 180: 5), of the same type as we find in Thessaly, yet with the difference that the Asine specimen is cut off sharply at both ends, while the Thessalian implements, on the other hand, are cut off obliquely at one end to give them the shape of a chisel. Nos. 8—10 are bone awls with large heads, made as a rule from ball-joints, and the tubular bone sharpened into a point (fig. 180: 6); this type is met with chiefly in the earlier Middle Helladic period — from Asine come no certain examples of E. H. date — and also occurs in Thessaly (cf. Tsountas, *Διμήνη καὶ Σέσχαλον*, Pl. 45). The long ones Nos. 11—13, and 18, well cut from tubular bones, remind one of E. H. 4—5, but are better made (fig. 180: 7, 8). Of the smaller, broad implements 14—17 No. 14 was found in Tomb M. H. 63, and No. 16 in Tomb M. H. 98. No. 17 is pierced at one end and probably served as a shuttle for weaving (fig. 180: 9). Nos. 19—23 represent a type developed from Nos. 8—10, swelling out towards a broad head, which is not articulated from



the pin itself (fig. 180: 10). Nos. 24—26 are a translation into bone of an old bronze shape, with a sharply marked, round head (fig. 180: 11, cf. below p. 000). Nos. 27—31 represent the finer type of M. H. pins with moulded heads (fig. 180: 12).

The broad polishing tool No. 32 (fig. 180: 13), made from a stout rib, and the long-shafted bone-awl No. 33, are of Late Helladic date. The ordinary bonepin during the Mycenaean period is represented by Nos. 34—36; No. 35 comes from the Mycenaean chamber-tomb 7 (fig. 180: 14). Finally, a pair of Hellenistic pins with eyes have been included (fig. 180: 15), reminding one of a type of mattress-needles still in use (37, 38). No. 39 (fig. 180: 16) bobbins-haped and pierced at the middle; it was found in a Hellenistic stratum, but reminds one in type of a gold-coated bronze spool from the Mycenaean chamber-tomb 1, and it is quite likely that it is Mycenaean. Another is a surface find.

Fig. 181: 1 shows a peculiar, thin sheet of bone, reminding one of present day bone paper-knives; small fragments of several similar ones have been found, all of them in pure Early Helladic strata. The specimen depicted here comes from a bothros on the »pre-Mycenaean Terrace«, with many E. H. III vessels, the fire-dogs, and the steatite pendant. The disc is finely cut with one deeper and two shallower notches on each side, and the head is pierced by two holes. The sides are finely worked

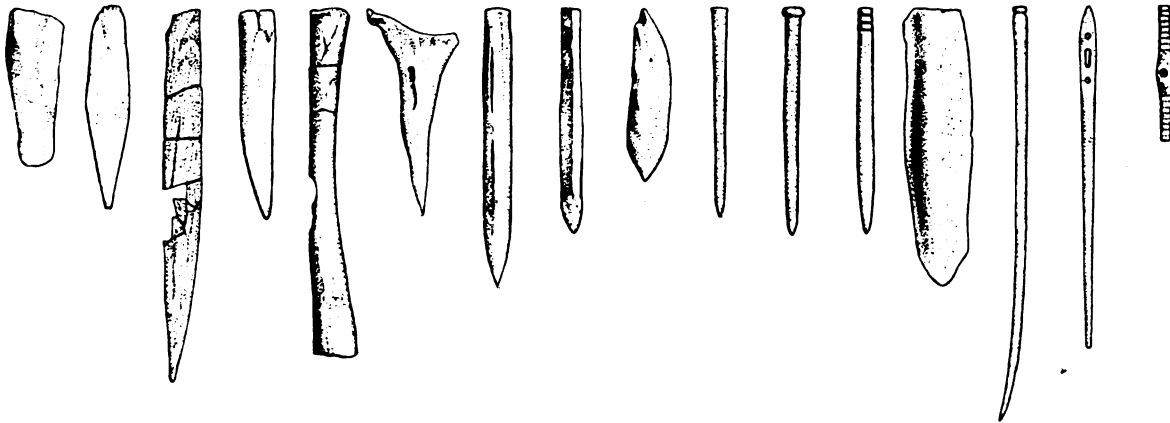


Fig. 180. Minor objects of bone.

and converge to a rounded point. It reminds one forcibly of the »prehistoric ivory hair-pins« known from Egypt<sup>1</sup>, and to some extent of the small idol figures of bone with holes drilled in the edges of which so many have been found, chiefly in Bulgaria.<sup>2</sup>

Nevertheless, though the object here referred to from Asine lacks incisions, and also the roughly marked human forms resemble the bone idols, I feel very much inclined to relate them with the Egyptian pins.

<sup>1</sup> Cf. Flinders Petrie, *Prehistoric Egypt*. Pl. VIII, Nos. 18—22.

<sup>2</sup> Cf. Hoernes-Menghin, *Urgeschichte der bildenden Kunst*<sup>2</sup>, p. 310 ff. and figs. 1—3 on p. 317.

In the Lower Town, in a purely Middle Helladic stratum, but in one of the latest, were found some fragments of a bone mounting for a sheath with a beautiful linear decoration (fig. 181: 2). Thanks to the pattern, the whole can be reconstructed with absolute certainty. Long, simple hooks with double outlines running downwards, join with other similar ones running upwards to form a broad band, which grows narrower as the bone mount tapers. Between this central band and the edges of the mount, which are also framed by lines, are some small geometric filling ornaments, small concentric circles with the centre marked, to the rims of which are attached one or more small triangles; other similar triangles are attached to the lines enclosing the central area. The exterior outline of each hook is interrupted opposite the point

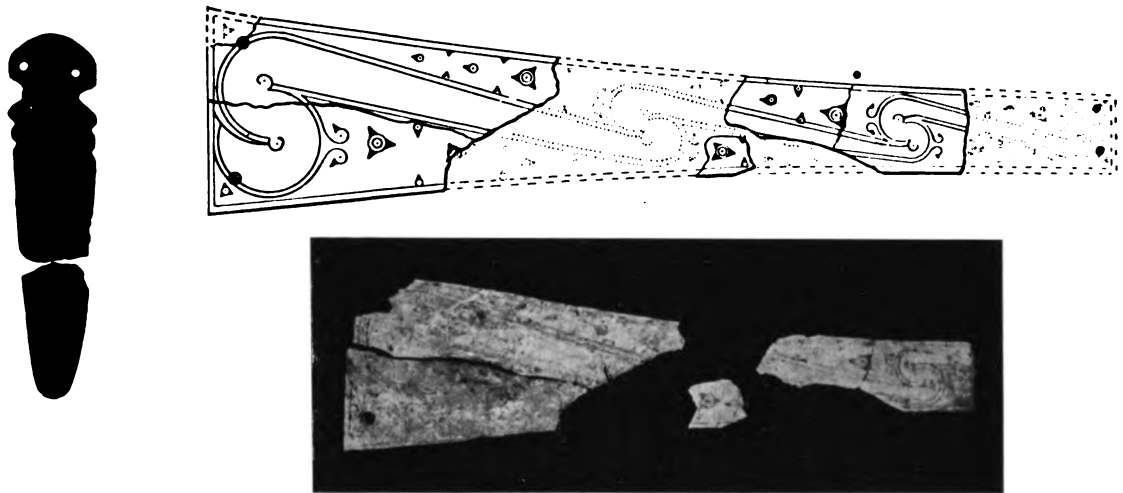


Fig. 181. Bone mountings.

where the hooks engage each other and turns outwards in a semicircular curve, in the centre of which is a dot, ending in a small triangle — the shape produced reminds one of birds' heads; inside the band, each hook finishes in a similar semicircle, but without the triangle.

This pattern with linked S-scrolls is met with in Crete already in the Second Early Minoan period, and thence has, as Evans has shown, a long life.<sup>1</sup> In the decoration of some of the finest M. M. II polychrome vases it plays a prominent part; one of the best parallels to our pattern is to be seen on just such a vase, found at Phylakopi.<sup>2</sup>

On the other hand, the decoration on the bone sheath from Asine is a close parallel to the decorated ivory discs that have been found in the vaulted tombs at Kakovatos-Pylos, and which have been published by Kurt Müller.<sup>3</sup> Here some of the filling orna-

<sup>1</sup> Cf. Evans, *Palace of Minos* II, p. 195 ff.

<sup>2</sup> Excavations at Phylakopi in Melos, p. 150, fig. 132; also Evans, *Palace of Minos* I, fig. 186 c and II, fig. 105 d.

<sup>3</sup> Cf. Müller, *Alt-Pylos*, in *Ath. Mitt.* XXXIV, 1909, p. 285 f.

ments are precisely the same, and also the dissolution of the outer outlines of the band ornamentation, but the decoration is more compact, while at the same time it is freer. One gets an impression that the decoration on the bone mount from Asine represents a preliminary stage of the ivory discs from Kakovatos. A younger, naturalistic development of the S-scrolls motive is to be seen on the spiral band which serves as a frame work on one side of the grave stele from Shaft-grave V at Mycenae. Here, the S-scrolls are arranged beside each other, without linking together. From the scrolls issue small spirals and »Zwickel»-leaves, which fill the spaces between the »Leit-motif» and the frame of the band itself.<sup>1</sup>

The drawing on the bone mount, for all its simplicity, gives evidence of a very sure artistic sense of ornament. It is very probable that it is closely related to the decorative scheme which had developed in vase-painting. The bone mount from Asine is, as far as I know, the oldest sculptured object of its kind we possess from the Greek mainland, and it has in this capacity a particular interest as the oldest representative of geometric decoration.

#### F. Metal

The metal finds from the older strata at Asine are very scanty. No precious metals were found from the Early and Middle Helladic periods, but, on the other hand, some bronze objects and various lead rivets. From Early Helladic III onwards the art of mending broken vases with lead rivets had been practised. In older times it was most commonly employed for storage vessels, the reason, of course, being that these were not only used for storing liquids but also dry goods, and a mended pithos was in the latter case no less useful than a whole one. For mending larger vessels, holes were drilled in the material on both sides of the fracture, and the lead melted into these holes was united both inside and out by means of relatively broad bands or strips which overshot the holes for a little distance, i. e. double rivets with their main lines prolonged at both ends.

In the Early Helladic house R on Terrace III, in Room III, was found a pin of bronze wire, well preserved but slightly bent. It has a length, from the head to its sharp point, of 0.10 m. The head is small, d. 0.006 m, and conical (fig. 182: 1). It belongs to the same group of pins as are already represented at Zygouries, p. 183 f., No. 9, Pl. XX, No. 17 and, also in the Cyclades; cf. Tsountas, Eph. Arch., 1899, Pl. X, No. 19. Another wire pin of the same kind was also found on Terrace III, close to the E. H. III House R.

A third wire pin without a head also comes from Terrace III, and was found in the E. H. III stratum just outside House R. This measures 0.11 m in length and is slightly bent. It has a short point at the upper end, and was probably once adorned with a knob of some other material as a head, cf. the marble knob, fig. 176: 10. The pin itself otherwise

<sup>1</sup> Cf. Müller, Frühmykenische Reliefs, in Arch. Jahrbuch XXX, 1915, p. 287 f.



resembles the previous one and has a bulging shape. Exactly the same types of pins are met with in Asia Minor.<sup>1</sup> Near Tomb M. H. 58, on Terrace III, was found a spear-head of bronze of a particularly characteristic type (fig. 182: 2), with remains of the spear-shaft preserved, thanks to the verdigris. This is the third specimen, the others being one from a tomb at Sesklo; together with a mould, and one from Leukas, depicted in Dörpfeld, *Alt-Ithaka II*, Beilage 74 a. In shape it tapers towards both ends, with a raised, hollow ridge on both sides, from the middle outwards to the point. It has a deep slit where the wooden shaft was inserted and a small hole farther down towards the point. On the end of the shaft are two small rivets. The Asine spear-head is 0.17 m long.<sup>2</sup> It represents, therefore, the older type of spear without a hole for the shaft. Fragments of a similar one have also been found at Mycenae.<sup>3</sup>

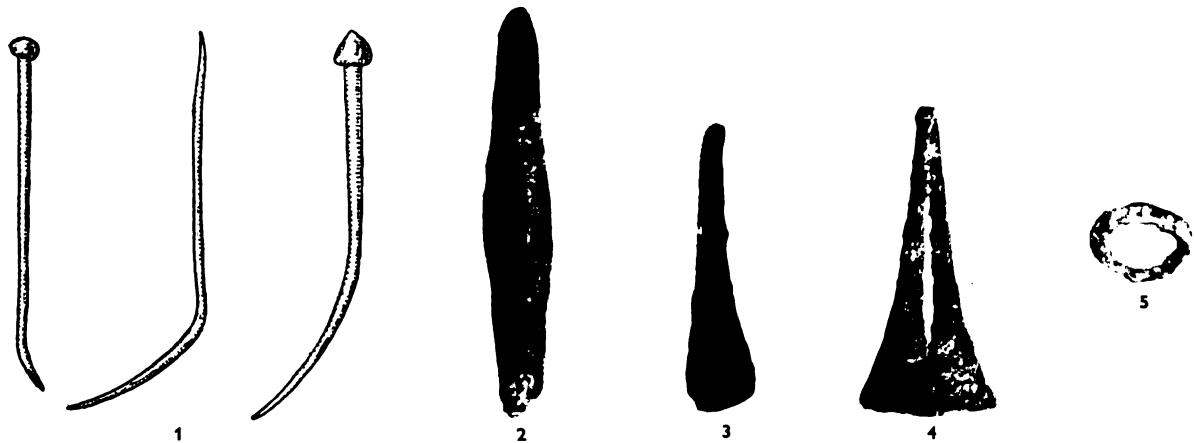


Fig. 182. Objects of bronze.

A bronze knife with thin silver plating came from Tomb M. H. 107 (fig. 182: 3). It was found with a pair of characteristic vases and an obsidian arrow-head. It has a length of 0.105 m, a width, at the handle end, of 0.025 m. The blade, which has one cutting edge, tapers fairly strongly right to the tang, and then terminates gently in a hooked point. The two rivets which held it to the handle are left. As to shape, it reminds one of a knife which Sotiriadis found in Phokis, though our specimen is more elongated towards the point.<sup>4</sup> But the type is also found in Asia Minor, e. g. at Alishar-Hüyük, 1928—1929, p. 154 ff, in Stratum II.

In the Lower Town, in Middle Helladic stratum, was brought to light a pair of tweezers and fragment of such of the older type, simply bent double at the top and widening

<sup>1</sup> Cf. Alishar-Hüyük, 1928—1929 in Stratum I, p. 58 ff., p. 158 ff. Dörpfeld, *Troja und Ilion I*, p. 354 ff.

<sup>2</sup> The scale in Dörpfeld's drawing is wrong — cf. Beilage 73, No. 16, which shows that the spear-head from Leukas is 0.19 m; that from Sesklo is not quite 0.16 m long. In Montelius, *Grèce préclassique*, Pl. 15, Nos. 13 and 15, the measurements are too small.

<sup>3</sup> Cf. Tsountas, *Δελφοί καὶ Σέσκλον*, p. 354.

<sup>4</sup> Cf. Sotiriadis, *Fouilles préhistoriques en Phocide*, in *Rev. Et. Gr.* XXV, 1912, p. 276, fig. 12, and *Eph. Arch.*, 1908, p. 63; Montelius, *Grèce préclassique*, Pl. 7, No. 2.

considerably towards the gripping end, which is bent inwards slightly so as to be able to grip better. The specimen reproduced here (fig. 182: 4) measures 0.08 m in length and has a width at the edges of 0.02 m. The same type is met with in Crete in E. M. times but without such wide edges — it probably originated in Egypt.<sup>1</sup>

In Tomb M. H. 98 from Terrace II were found, together with an early M. H. vase, and a whorl, two earrings of bronze, d. 0.025 m (fig. 182: 5). They were discovered one on each side of a skull. They are made of solid wire, somewhat pointed at the ends. In this instance it is beyond doubt that the objects are earrings. Blegen, who found something which with great hesitation he assumes to be earrings of gold in two E. H. tombs at Zygouries — only one in each tomb — says that there is »no evidence to show that earrings were worn until a much later period».<sup>2</sup> By this find their use in the early M. H. period has been established, which is by no means surprising when we consider what a multitude of earrings have been found in Troy II—V. I know of no counterpart to our rings, except at Alishar-Hüyük in Stratum II.<sup>3</sup> Two skeletons there had two pairs of bronze rings of exactly the same kind.

## MIDDLE HELLADIC

Remains of Middle Helladic culture have come to light practically everywhere at Asine. On the acropolis, certainly, because of the scantiness of the surface soil, only traces of settlement exist, but in the Lower Town continuous areas, with considerable wall complexes have been excavated down to the M. H. level, both on Terrace III and in the southern part of the Lower Town proper. Wherever the M. H. strata are superimposed on E. H. strata, the two are separated by a thick burnt layer. The change from M. H. to L. H., on the other hand, is marked, only by floor-levels, which indicates that in the latter case no such abrupt break in the development of culture occurred as in the former case.

At Asine, as at Eutresis, three M. H. periods can be distinguished, which nevertheless do not appear to correspond to each other at the two places. It should be added in this connection that M. H. I obviously represents a relatively short period, but I consider that it should be treated separately.

## POTTERY

The preliminary stages of Minyan ware later so characteristic are the typical pottery of M.H.I. Here belong the different types of Polished or Burnished ware, which to a certain extent may be said to be a continuation of that already

<sup>1</sup> Cf. Xanthoudides, *Vaulted Tombs of Mesará*, p. 28.

<sup>2</sup> Blegen, *Zygouries*, p. 181.

<sup>3</sup> Cf. Schmidt, *Alishar-Hüyük*, 1928—1929, p. 155 and fig. 199.

existing in E. H. layers though the shape of vases and technique of firing are now quite different. A good many sherds of Red-burnished ware with a strong slip belong to this period, but they appear rather to be imports from the Cyclades, as is also some Black Incised pottery. No traces of a real potter's wheel are to be found. The forms still lack the characteristic sharp profile lines of the later Minyan ware, and the bottom is flat throughout. It is a preliminary stage of Minyan, if one wishes to retain the old characterization of Minyan pottery. Also characteristic of the period is the absence of matt-painted ware.

During M. H. II only Grey and Black Minyan ware are found of the preceding wares, but now with a well-articulated, angular profile, and, on the smaller vases, with a proper foot in the shape of an even disc, occasionally slightly concave in the middle. At the beginning of the period matt-painted ware makes its appearance, with strictly geometrical patterns, sometimes on vases of Minyan shape. At about the same time is found a ware with lustrous paint, either as dark on light or with geometric patterns in matt white on a dark ground of lustrous paint, i. e. light on dark. The vases are still made without any actual potter's wheel, the finest Minyan ones having been clearly made in moulds.

M. H. III is characterized by finer forms and freer patterns, clearly under a strong influence from Crete. Black Minyan ware disappears altogether and Grey Minyan is now second in importance to Yellow Minyan. Matt-painted ware also now occurs in two shades, black and lilac. Dark on Light Glazed ware disappears while Light on Dark continues to exist with freer, often naturalistic patterns, alongside Polychrome ware in three or four colours, dark lustrous ground, matt lilac and white, with the natural colour of the biscuit as the fourth. It was not until this period that the potter's wheel came into use at Asine, but not everywhere — many vases are still hand-made.

The brief description here given is based mainly on stratigraphical observations made in the deep excavations, but each period is, nevertheless, represented by finds in typical building complexes.

#### MIDDLE HELLADIC I

With the beginning of the M. H. period the most characteristic kinds of E. H. pottery suddenly die out and all relations with Crete cease. Only Polished ware still occurs, but with new variations. The M. H. I pottery is on the whole distinguished by its softness and poorer firing. The material easily retains its grey tint or passes into yellowish-grey, but may also, through surface treatment assume different shades, from leather brown to black. Efforts were clearly made to produce a glossy surface, and already the peculiarity of the later Minyan ware, to feel greasy to the touch, can be felt. It seems as if the surface had been wiped with a wet cloth before firing, and after that been subjected to strong treatment with some fatty substance. In order to obtain the black tint, which was so much appreciated during this period,





Fig. 183. M. H. I pottery.

it seems as if soot had been worked into the still unfired clay, or a subsequent polishing process with this naturally fatty substance had taken place. Our fragment No. 1 (fig. 183: 1) shows us this process interrupted before the whole vessel had been subjected to it, and only the rim had been given a black lustre. No. 2 (fig. 183: 2) shows a blackish-brown shade, Nos. 3 and 4 are black and lustrous, Nos. 5 and 6 have retained their natural clay colour. The fragment No. 6 constitutes a specimen of the finest Minyan pottery from this period, soft material and soft, curving forms, with flat bases. Its immediate prototypes are found in Anatolia, e. g. *Sammlung Trojanischer Altertümer*, 676—87, 1002, etc. No. 7 is a coarse, grey fragment of a rim from a vessel which subsequently vanished from the Minyan repertory, and both Nos. 9 and 10 belong to similar vases, open bowls or cups. The rim itself is set on as on later, matt-painted vases and the types point to the East, more particularly the Cyclades. The sherds, Nos. 9—10 are yellowish grey, but differ in definite ways from the later Yellow Minyan pottery.

The decoration where it exists, consists of one or more incised, shallow lines below the rim or on the shoulder. The handle, as always, is flat and runs in older shapes in a small loop, on the cups from the rim to the shoulder whereas, on the bowls they are lower on the shoulder.

Besides this pottery we encounter also, though in smaller quantity, a ware with a dull, red slip, Nos. 11—12, strongly reminiscent of the old Anatolian, and beside this brilliant, highly lustrous ware, Nos. 13—14, the same as that found in the Cyclades, and of which examples were already to hands in E. H. III. The small piece of handle, No. 14, as further confirmation, bears a pottery mark known from Phylakopi — cf. *Phylakopi*, p. 179, F 13. Black ware also occurs, of another kind than Black Minyan, with incisions that may have been filled with white pigment.<sup>1</sup> Our small bottle No. 15 (fig. 183: 15) (h. preserved 0.065 m) corresponds to a squat jar or jug from Eutresis, p. 135, fig. 182. No. 16 was askoid in shape, for reconstruction, cf. *Blegen, Zygouries*, Pl. XII, 2, E. H. patterned and incised ware. The concentric semicircles which here occur between parallel bands, then disappear and do not reappear until L. II. III. Forsdyke has expressed the opinion that when they occur in Greece at this later period, they are evidence of influences from Central Europe.<sup>2</sup> And it is just in the Mondsee culture that these concentric semicircles are found in the »Danordic« culture in East Central Europe (*Childe*, p. 116 ff.) in the older period now in question — together with quite a good many other M. H. characteristics to which we shall revert in the Conclusions.

Fragment No. 17 belongs to a jug, probably of the same shape as No. 15, with three incised bands round the neck, and impressed with concentric circles filled with a white pigment, these circles being spread over the body of the vase. The ware is fired hard and has a black lustrous surface, a slip that has been put on after the pat-

<sup>1</sup> Blegen erroneously treats them together with Black Minyan, in *Korakou*, p. 17.

<sup>2</sup> Cf. Forsdyke, *Prehistoric Aegean Pottery*, B. M. Catalogue, p. XLII.

tern had been impressed, i. e. not identical with that of the Black Minyan ware. Exactly similar sherds have been found at Korakou, p. 17, and the impressed concentric circles are at Eutresis, according to Miss Goldman, in E. H. I (p. 81 f.), but, subsequently, also in M. H., impressed on Grey Minyan, p. 42 ff., and chiefly on imported Cycladic pottery, p. 182 ff. It seems to me obvious that the ware at Asine is imported Cycladic. Nos. 18 and 19 are fragments of small pyxis-lids with vertical string-holes in rounded projections at the rim.

The fragments No. 20 belong to a coarse vase of brown-greyish ware of a type that is common chiefly in western Greece, at Malthi in Messenia, at Asea in Arcadia, at Leucas, etc.

A clear illustration of M. H. I pottery is provided by the finds from House T on Terrace III, and I shall here summarize the finds from this place (fig. 184: 1—11).

1. Goblet, h. 0.14 m, d. 0.115 m, standing on a high stem with broad, bell-shaped foot; squat globular body with slightly out-curved rim and a flat loop handle set horizontally on the middle of the body. Coarse, practically unsilted clay, grey in colour and with a surface that, though it has no marked polish, has a certain greasy lustre. Hand-made; both the bowl and the stem show distinct traces of working in order to attain the shape. The bowl has rows of holes at the top and bottom right through the wall of the vessel, and between the rows, at about the middle of the body, are seven T-shaped notches, which are slit through the walls and a group of three holes on each side of the handle. — Blegen found a goblet or chalice, at Zygouries which is technically similar but in less certain stratigraphical associations — he dates it to the E. H. period but our specimen was found in a corner of the M. H. house. Mylonas has published another, similar vessel from Eleusis, likewise certainly M. H. (*Ελευσινιακά* I, p. 86, fig. 57). From Asine we also have fragments of other, similar vases. Blegen has expressed the opinion that they may have been »some kind of a brazier or incense burner». However, neither our goblet shows, nor the specimen from Eleusis, bears any traces of burning in the inside and I believe rather that they should be placed in the same category as the numerous »siebartig durchbohrte Vasen», that have been found at Troy in the II—V cities.<sup>1</sup> There is a similar vessel from Eutresis — but from E. H. II, according to Miss Goldman (p. 106, fig. 140) — also without any sign of burning on the inside. If the goblets and other smaller pots should be connected with larger jars, there can hardly be any question of interpreting them as a kind of double boiler, as Miss Goldman suggests. I agree, however, with the other suggestion advanced by Miss Goldman, to the effect that they were intended for the manufacture of some semi-solid cheese, in which case the perforated surface would facilitate the evaporation of water. Such a use would also explain the fatty sheen these vases have. On the other hand, it must be said that the shape with the narrow mouth speaks against this explanation.

<sup>1</sup> Cf. Schliemann's *Trojanische Altertümer*, 2846—2867, and Schliemann, *Ilios*, p. 620 ff.



In a corner of the M. H. house were found two other vases close to each other, a jug with cut-away neck and a two-handled cup, Minyan ware.

2. Jug with cut-away neck. H. 0.14, d. 0.125 m. The upper part of the neck and the handle are missing. Globular body with flattened base and very short neck — there are exact E. H. parallels; cf. fig. 167: 2 for the shape. Black-burnished ware of coarse clay, in shape strongly reminding us of Anatolian vases.

3. Two-handled cup. Grey Minyan ware. H. with handles 0.095 m, d. 0.085 m. Spherical body with flattened base and rounded shoulder, and a gentle transition from body to the slightly flaring rim; two flat loop handles rising vertically, high above the rim and joining the body half-way up. For the shape, compare Eutresis, p. 139, fig. 187, and Trojanische Altertümer, No. 1218. Hand-made.

In a bothros in the south-western corner of the house was found a large quantity of Minyan sherds, of which we have succeeded in reconstructing two vases. In the lower stratum of the bothros lay parts of a large cup with a handle and at a higher level a two-handled bowl.

4. Cup, blackish-grey Minyan ware. H. 0.105 m, d. 0.135 m, d. of base 0.07 m. Parts reconstructed, including the handle. Spherical body with flattened base and flaring rim and with a flat loop handle set vertically from the rim to the middle of the body. The profile is still without angularities. The handle, whose attachment is preserved, may have been somewhat higher. Hand-made.

5. Bowl, greenish-grey Minyan ware. H. 0.135 m, d. 0.155 m. Shape as last but with two flat loop handles set vertically from shoulder to the broadest part of the body. Hand-made.

Inside the upper room VI on a level with the floor were found:

6. Bowl, Grey Minyan ware, partly reconstructed. H. 0.205 m, d. 0.22 m, d. of base 0.085 m. Shape as last, but higher. Between the rim and the shoulder above the handles seven faintly incised lines. Hand-made.

In the room VII was found a large quantity of Grey Minyan sherds from several vessels. One of them has been reconstructed.

7. Bowl, Grey Minyan ware. H. 0.20 m, d. 0.205 m, d. of base 0.095 m. Shape as last. Between the rim and shoulders above the handles three faint raised ridges which have been caused by the point of a polishing-stone being pressed against the still soft clay-wall, and moved horizontally round the vase. Hand-made.

Not a single matt-painted vessel was thus found on the floor-level in this M. H. house, a fact which should be specially noted.

To M. H. I belong also the finds from Tomb M. H. 98 on Terrace II, where besides earrings of bronze (cf. above, p. 126) and loom-weights (cf. above) was also found a bottle of blackish-brown lustrous ware (fig. 184: 8). H. 0.14 m, d. 0.13 m. Globular body with flattened base and narrow neck, which rises in a gentle curve from the body of the vase, and then again widens with an outward curve towards the mouth.



Fig. 184. M. H. I pottery.

Below the rim, on opposite sides, two string-holes on each side. The shape is striking in the Greek repertory, but has its exact counterpart at Troy II — cf. e. g. Sammlung Trojanischer Altertümer, 1489: »Kugelbauchige Flasche mit trompetenartig sich öffnendem Halse und guter Standfläche: am Rande zwei in den gebrannten Thon eingebohrte Schnurlöcher».

Kindred with this both in shape and technique is a large vase that had been used for a child's burial (Tomb M. H. 11; fig. 184: 9).

Two-handled jar. Lower Town, Square F 6. H. 0.36 m, d. 0.34 m, d. of mouth 0.23 m. Globular body with round base and wide low neck which rises gradually without any sharp transition out of the body and widens towards the mouth in a convex curve. Below the rim to the shoulder two vertical, flat handles. Dark-brown lustrous surface with distinct traces of use above a fire.

Similar again is another vase which also served for a child's burial, Tomb M. H. 45.

Two-handled jar (fig. 184: 10). H. 0.26 m, d. 0.25 m, d. of mouth 0.16 m. Bellshaped type with flattened bottom and low, wide neck like the preceding one. Two broad, flat loop handles set vertically from rim to shoulder. Reddish-brown ware without high-lustre. Exactly the same shape is found in a jug (Square M 5), of which the lower part, however, is missing. On the handle, at the lower end, there is the impression of a thumb.

To M. H. I belongs also a jug found between the houses R and T, on Terrace III.

Jug (fig. 184: 11), partly restored. H. 0.135 m, d. 0.135 m. Spherical body with flattened and flaring rim, and with small, round loop handle from rim to upper part of body. It is decorated with three pairs of nipple-like pellets on the front, at a height with the lower end of the handle. These nipple-like pellets are also met with elsewhere in Greece, e. g. at Zygouries, p. 178, but they are without doubt to be placed in the same category as the same phenomenon in Asia Minor. At Troy, they are very common on vases of different kinds, inter alia on jugs and cups. The clay is reddish-grey and obviously copiously mixed with straw, so that it has the appearance of asbestos. The surface has been lustrous, but has cracked severely. The vase had been used as a cooking pot, and shows distinct traces of fire.

A distinguishing feature of all the M. H. I pottery types is the predilection for lustrous surface, and occasionally the marks of the polishing tool can be distinguished. Another feature they have in common is that the pottery of this period does not have a raised base, having either a rounded or only flattened bottom. The variety of shapes is relatively poor: Goblet, cup, bowl, bottle, jar, and jug are the shapes that could be proved. A distinguishing feature of all of them is the rounded, soft outline, without any sharp angle at the transition from the body to the shoulder or neck (on bottle and jar). The rim, where it does occur, always flares outwards, never horizontally, as for example the rims of Minyan bowls during the following period. The handles, always vertical, are, as a rule, flat and comparatively small, with their upper point of attachment either near the rim or on the shoulder.



## MIDDLE HELLADIC II

Middle Helladic II is characterized on the one hand by a further development of the pottery from the previous period, on the other, by a significant addition, that of both matt-painted and glaze-painted ware — a glaze-paint which nevertheless differs clearly and distinctly, from so-called »Urfirnis». The novelties now introduced obviously come from the Cyclades, which in their turn, to judge from the evidence, had adopted the matt-painting from Asia Minor, and glaze-paint, at least partly, from Crete. It was not until the end of the period that direct intercourse was again established between Asine and Crete, as is seen from the new vase-shapes and a new technique, due to the more general use of the potter's wheel. It is these novelties which there entitle us to make a division in the development.

If we now first take into consideration the Minyan pottery belonging to the period, we find the open two-handled bowl but its shape now tends to be carinated, with an abrupt angle between body and shoulder instead of the soft outline of the previous period. A pair of vases were found east of Wall 17 on Terrace III, one of them a Black Minyan bowl and the other a Black Minyan two-handled cup.

Two-handled bowl (fig. 185: 1), Black Minyan. H. 0.19 m, d. 0.28 m. Carinated, shape with abrupt moulded angle between body and shoulder, flat base and horizontal, offset rim, two broad loop handles placed close to the transition from body to shoulder. On the shoulder two pairs of thin, incised lines, and two more on the upper part of the body of the vase. Hand-made and soot-lustrous, with traces of polishing instrument, with the exception of the lower side of the base, which is reddish.

Two-handled cup, Black Minyan (fig. 185: 2). H. with handle 0.075 m, d. 0.09 m, d. of base 0.03 m. The body has straight sides, rising obliquely with sharp shoulder and rim turned out slightly. Relatively high flattened base, two high, flat loop handles. The greater part of the black polished surface has cracked, so that the brownish-red biscuit is visible. This flaking off of the lustrous surface is due to too weak firing of the clay and too forcible burnishing.

Another wrongly reconstructed cup, which certainly had two high loop handles, coming from Terrace III, suffers to some degree from the same faults as regards the surface as the last one, in that in places the black polished surface leaves the brownish-red clay exposed.

Two-handled cup — handles missing (fig. 185: 3). H. 0.055 m, d. 0.11 m, d. of foot 0.035 m. Shape as last but broader horizontal rim.

The same remarks as to the treatment of the material hold good also for a vase from the western part of the Lower Town.

Two-handled cup, one handle missing, part of the bottom of the foot has flaked off (fig. 185: 4); Grey Minyan. H. with handle 0.095 m, d. 0.135 m. Body as last but shallower, sharp shoulder with three fasciae and flaring rim. The foot was flat at the

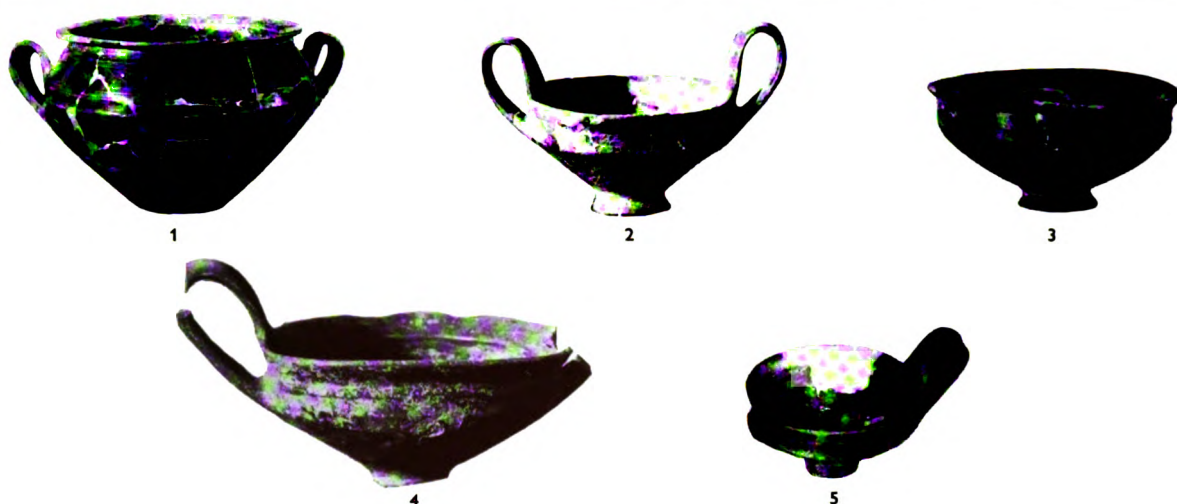


Fig. 185. M. H. II pottery.

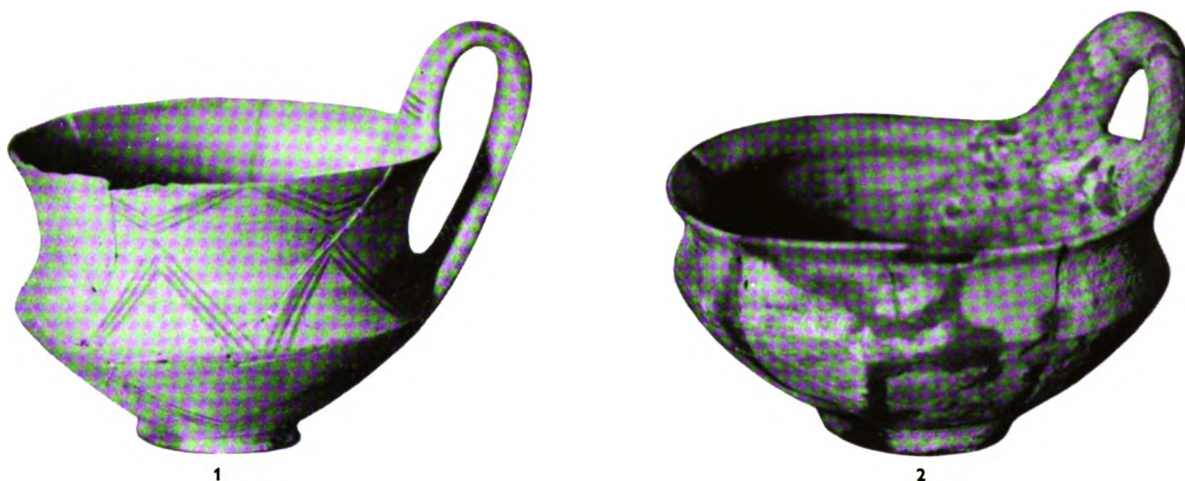


Fig. 186. M. H. II pottery.

bottom, but had not been properly worked together with the body. Two high, flat loop handles. Surface treatment like last.

From Square G 14 comes a similar, slightly smaller cup.

Two-handled cup, one handle missing; Grey Minyan (fig. 185: 5). H. 0.08 m, d. 0.105 m. Shape as last but the shoulder is here moulded; foot with flat underside.

An extremely interesting Grey Minyan vessel comes from Tomb M. H. 107, on the acropolis. The whole contents of the tomb are reproduced on fig. 186, and are typical of M. H. II.

One-handled cup; Grey Minyan. H. with handle 0.105 m, d. 0.125 m, d. of foot 0.05 m. The body has sides sloping gently from a raised base, sharply from lip, and meeting at an angle; the profile of the upper part is concave. A horizontal loop handle rising from the rim.

This vase, as well as many of the finer sherds, shows, in so far as the lower part of the body is concerned a clear tendency to split in the middle of the biscuit so that an outer and an inner layer are obtained; the vase might almost be thought to be made in two layers covering one another (fig. 187: 1). I have already before pointed out that this is explicable in the following way: the particles of mica which the clay contains get on edge when the clay is subjected to very severe pressure and thus cause a fissure in the middle of the biscuit, as we have seen. — The flaking off of the lustrous surface in some of the cups dealt with above is due, as already stated, to the same cause. The simple explanation of this central cleavage in the biscuit is that the vases were pressed in moulds, and it is quite natural that the cleavage occurs

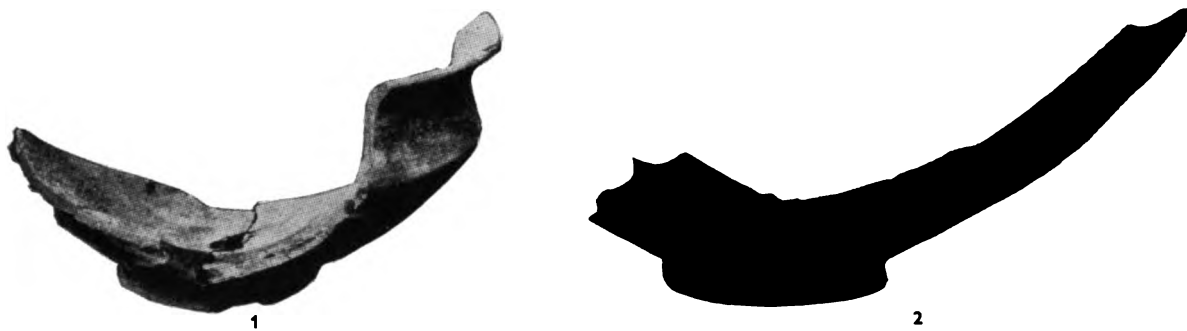


Fig. 187. M. H. II pottery (No. 2 from Berbati).

only in the bottom and in the lower part of the body of the vase, not in the rim, which must have been shaped by itself by hand fixed and to the lower part, after the latter had left the mould. This peculiarity of the finer Minyan vases at Asine was pointed out already in *Rap. prél. sur les fouilles d'Asiné 1922—1924*, and it is by no means my intention to maintain that all the pottery which passes under the term «Minyan» was manufactured in this way<sup>1</sup> — there is a large number of different kinds. Some shapes, e. g. all those dealt with under M. H., I naturally do not consider to have been made in moulds. What I have previously pointed out, and still adhere to, is that the finer Minyan vases at Asine which are angular in outline, show clearly that they have been made in moulds. We have likewise examples of these from Berbati-Prosymna (cf. fig. 187: 2).

Besides bowls and cups, already during this period occur the typical Minyan goblets with ringed stems.

Stemmed goblet, Square C 4, of the Lower Town; Grey Minyan (fig. 188: 1). H. 0.18 m, d. of mouth 0.165 m, d. of foot 0.11 m. Open shape with sharp angles between body and shoulder and between shoulder and rim; four small loop handles between rim and lower part of shoulder. High, ringed stem with spreading foot. The rings, which are altogether twelve in number, also cover part of the body. It belongs thus

<sup>1</sup> Cf. Blegen, *Zygouries*, p. 126; Goldman, *Eutresis*, p. 138.



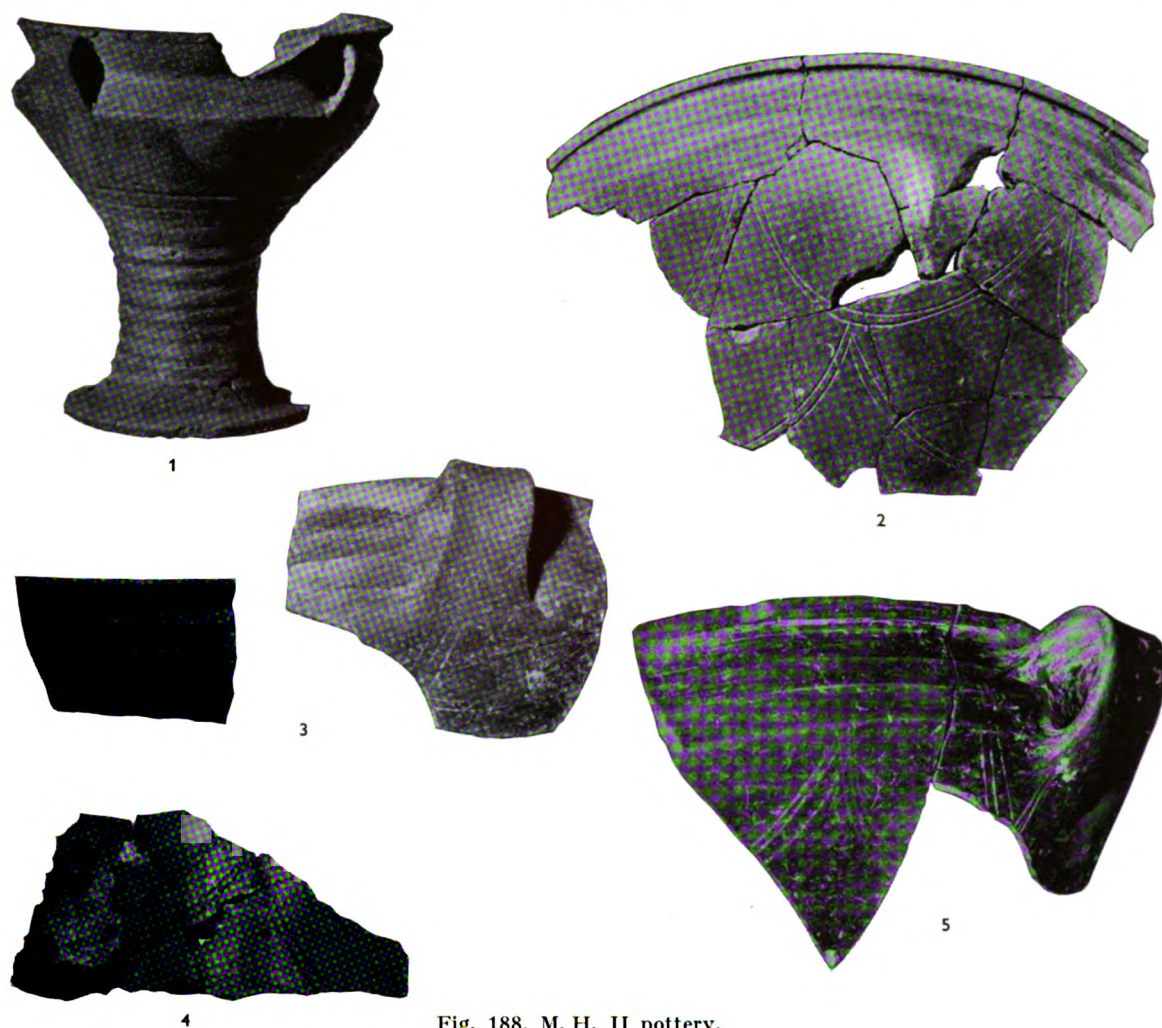


Fig. 188. M. H. II pottery.

to the so-called «northern» type with many rings; the «southern» should only have one or two.<sup>1</sup> This distinction is surely wrong; at Asine the type with many rings is by far the more common. As regards the handles, it is worth pointing out that the type with high, horizontal handles rising from the shoulder-angle above the rim, of the same type as were found at Eutresis, p. 136, fig. 184, 4 and 5, also occurred at Asine.

A relatively large quantity of incised Minyan ware, both black and grey was found at Asine but not until M. H. II. No whole vases could be reconstructed, so some fragments of typical two-handled bowls are reproduced here (fig. 188:2—5). The angle at the shoulder is in all instances sharply marked by three fasciae, a further development of the incised lines or marks made by polishing tools of the previous period, which produced small ridges. The decoration on the body of the bowl consists of a large scale-pattern, whose first row joins the base to the shoulder of the vase,

<sup>1</sup> Blegen, Korakou, p. 15.

a prototype of the pattern common on L. H. pottery. Every scale is drawn with double or treble outlines. A sherd with, in part, another pattern is certainly of the typical Grey Minyan clay, but completely lacks polish. It looks as if we had here an unfinished product, which had been discarded on account of the irregular, in this case incised, decoration that had been a failure, and, consequently, had not been subjected to the burnishing process.

#### A. *Matt-painted ware*

During M. H. II matt-painting reached Asine and the matt-painted ware is just as characteristic of the period as the Minyan. We have also a small pottery group that is an intermediary link between them, of course not the very oldest matt-painted on the mainland but yet coming within the limits of M. H. II. An excellent example of the pottery here referred to is provided by one of the vases from the tomb on the »pre-Mycenaean Terrace» (fig. 186: 1); Minyan in shape but the surface treatment similar to that of matt-painted ware.

Cup, matt-painted ware. H. with handle 0.11 m, d. 0.125 m, d. of base 0.045 m. The cup has a wide mouth and a low foot. The sides are bulging for nearly half their height; upper part concave. The handle is a flat loop, rising high from the rim and joining the body of the vase at the sharp angle between the upper and lower part of the body. Greenish-grey clay. The decoration consists of triple chevrons from the rim and the sharp angle of the body with their apices towards each other and larger chevrons with their points towards the foot on the lower part of the vase. The inner part of the rim and the handle are each decorated with groups of three horizontal lines. The paint is matt-lilac in colour. For the shape of the body compare Cycladic pottery (e. g. Phylakopi, Pl. XI, 9, and M. M., B. M. Catal. I A. 460) which may be said to be degenerate types.

A largish fragment of a cup of yellowish clay, identical in shape, shows a richer decoration. Vertical panels with double outlines enclose double zig-zags, closer together on the upper concave part, more sparsely on the lower part of the body of the vase, where they have a filling of plain circles surrounded by a row of dots. The inside of the rim and the handle are here decorated with horizontal lines. The colour is the same. — Another fragment has a more vertical upper part, and does not show the concave profile. The shape resembles that of Cycladic vases, Phylakopi, Pl. VIII, 9. The decoration consists of narrow, horizontal bands of double chevrons facing each other, or concentric arcs. The clay in this case is reddish and the paint matt-lilac.

To the oldest matt-painted pottery from the stratigraphical evidence, belongs a vase found in the Lower Town, unfortunately fragmentary and reconstructed.

Bowl, with handle and possibly spout. Lower Town, Square D 4. H. about 0.12 m, d. of mouth 0.215. Low saucer-shape with edge curved inwards, lower part recon-

structed. Vertically pierced lug-handle set horizontally on the shoulder and possibly spout on opposite side. Greenish-grey clay. The design is made up of groups of obliquely placed lines, alternately to right and left, between border lines on lip and shoulder.

This is obviously the same type of vase as we have already met in M. H. I in red polished ware, typical Cycladic imports, and in this case too intercourse with the Cyclades may be considered fairly certain. For exactly similar decoration, cf. e. g. Phylakopi, Pl. XXXIII, 6.

The matt-painted pottery at Asine which belongs to M. H. II is practically all hand-made, even in M. H. III there is still some hand-made ware. The bulk of the pottery is coarse, with exclusively geometric patterns, mostly straight lines; but circles and arcs also occur as well as wavy lines. The clay is in most cases greenish-grey right through but in some instances only coated with a thin slip of this colour.

The decoration consists mostly of straight lines, occasionally forming panels and groups of straight or obliquely placed transverse strokes. The later, still more common, »metope and triglyph» division, already occurs. Occasionally, arcs between and below the straight bands are found. Among the exceptions are the fine rim-bands, edged on the outside with tiny dots or as a convenient substitute for this with long zig-zags. Concentric circles occur and, probably even during M. H. II, spirals also. In some cases the matt-paint has been so plentifully applied that the sherds give the impression of light on dark decoration. To the more developed patterns belong hatched triangles, and groups of lines drawn at right angles to the horizontal bands. Thin, parallel lines with a solid filling occur as also the latter dissolved into a row of dots. Finally, occur rows of lozenges between parallel lines, the latter also with a row of solid triangles along the edge. With this the M. H. II repertory of decoration is by no means exhausted, but the most characteristic patterns have by now been mentioned.

The number of whole matt-painted vases from Asine belonging to the period is relatively small in proportion to the number of sherds. Here belong two small vases found in the western part of the Lower Town, which certainly come from the same workshop; both the coarse, poorly levigated, yellowish clay, and the thickly encrusted paint now largely flaked off, give evidence of this.

Cup with ringhandle (fig. 189: 1). H. 0.06 m, with handle 0.095 m, d. 0.075 m, d. of base 0.045 m. Conical shape with faintly outcurved sides and slightly raised base. It has a thick ring-handle set vertically on the rim at one side. The side handle is found in M. H. times on matt-painted Minyan, and also on coarse ware.<sup>1</sup> The decoration consists of two parallel bands of black paint around the upper part of the body, with a large zig-zag between, and a third horizontal band, which divides the zig-zag into two, and a row of lines on the outside and the inside of the handle. The greater part of the paint has vanished.

<sup>1</sup> Cf. Blegen, *Zygouries*, p. 131; *Eutresis*, p. 177.





Fig. 189. M. H. II pottery. Matt-painted ware.

Two-handled bowl (fig. 189: 2). H. 0.09, d. 0.125 m, d. of base 0.05. m. Deep shape with sides sloping gently from raised base, sharply from lip, and meeting at an angle; the profile of the upper part is slightly hollow. Two small vertical loop handles from immediately below lip to angle of the body. The decoration is limited to the upper, hollow part of the vase and consists of double intersecting zig-zags between two broad lines. The handles are barred.

Two-handled bowl, found in the Lower Town, Square I 3. H. 0.14 m, d. 0.225 m, d. of base 0.075 m. Sides sloping gently from raised base, changing into straight, inward sloping shoulder, with offset lip. At the transition between body and shoulder two broad, sharp horizontal projections, each one with two vertical string-holes. Reddish-yellow clay. The decoration on the shoulder, framed by two bands, consists of double zig-zags and below them, on the upper part of the body, double pendant arcs. On the inside of the lip appear quadruple motives of double concentric arcs.

Two-handled jar (fig. 189: 4), fragmentary, from western part of Lower Town. Preserved height 0.31 m, d. 0.26 m. Spherical body with high neck and two horizontal round loop handles. Greenish clay. The decoration consists of three bands on the

shoulder below the neck, curved lines round the handles, and in the space between the shoulder line and the handle-line repeated pattern of two large concentric circles. Below the rim, on the neck, there had been one or more bands.

#### B. *Glazed ware*

We pass on now to the third, hitherto less noted, group of finer pottery, in which a lustrous glaze-paint is used either directly as a pattern, dark on light, or as a ground colour all over the body of the vase, on which a pattern is then drawn in matt, white paint, light on dark. Both kinds occur side by side during M. H. II, but a decided preponderance in favour of the latter can be traced, and we also see that the dark on light technique for glazed ware does not occur during M. H. III, while, on the other hand, light on dark is found.

Both these techniques certainly came from abroad. A closer study of pottery of these types shows that it is impossible to derive them from the E. H. III technique, an idea which would otherwise be quite natural. The ware has a peculiar appearance, brownish-red, finely levigated, firm and even in consistency, with a plain surface on the inside, a fine lustre on the outside, hard and evenly fired. This is so characteristic that one can hardly make a mistake about this glazed ware, and it is not met with in any other group of ware in either the E. H. or M. H. period. The glaze-paint is more brilliant than E. H. III glaze, and brown or blackish-brown in colour, a shade that is also strange to E. H. It is tempting to consider it an import, because this ware has a »porous character«, the exact opposite to our clay. But it may perhaps be a native Argive product. The technique of decoration, however, displays striking coincidences with the Melian from Phylakopi, where it had been in use already »in the early period of the First City,« as a more convenient method, than incised ware but on the whole adopting patterns from the latter.<sup>1</sup>

#### C. *Dark on light*

The vast majority of sherds show only decoration with parallel, thin lines issuing from a broader band. Only few sherds therefore have been given as examples. The patterns which can be distinguished are almost exclusively found on corresponding sherds from Phylakopi, Pls. VII—X. The only fragment of any size which could be pieced together belongs to a probably beaked jug with a group of bands round the neck and shoulder, and then groups of obliquely placed lines, alternately to right and left. The clay is in this case uncommonly porous and it is possible that we have here to do with a Melian importation (fig. 190). In all these cases the lustrous paint was applied directly to the smoothed clay, without any slip. But we possess also some sherds where the ware was first coated with a milk-coloured slip, and where the paint

<sup>1</sup> Cf. Phylakopi, p. 249 f.



is less lustrous. The patterns of the decoration are the same, mostly straight, broad and thin lines. Some sherds may be denoted as transitional forms between »light on dark» and »dark on light», in which the decoration is of such a kind that it is impossible to determine which was the fundamental colour intended. Only glaze-paint and the natural tint of the vessel are contrasted with one another and matt white colour is absent. Most notably are some with an obviously light ground, but with broad, dark bands with matt zig-zags over the light surface, together with an ordinary dark on light pattern.

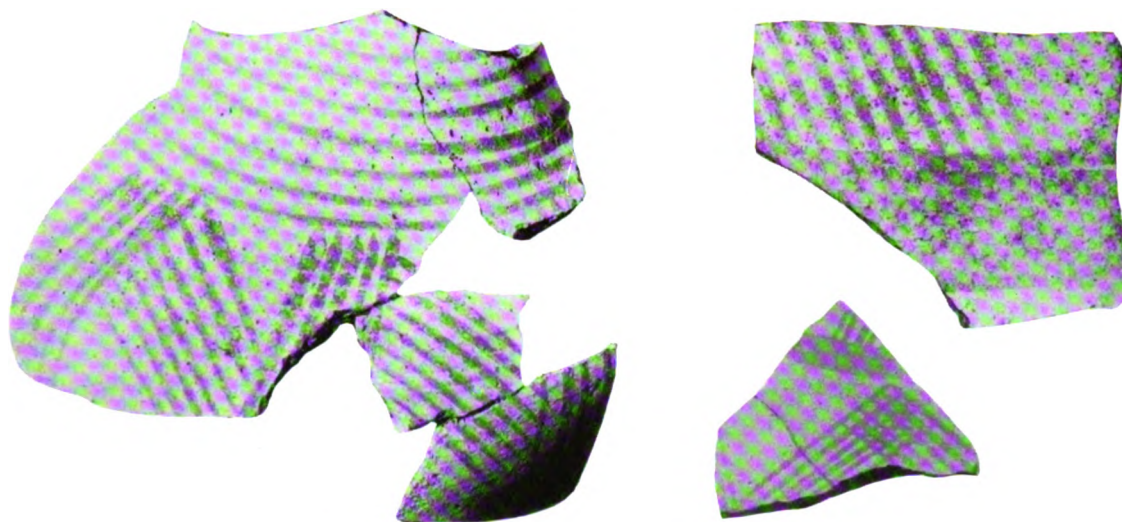


Fig. 190. M. H. II pottery. Dark on light ware.

#### *D. Light on dark*

As has already been mentioned, light on dark ware is more common at Asine than dark on light. There can be no doubt that this technique reached Asine from the Cyclades, which, of course, does not prevent the Cyclades in their turn having adopted it from Crete. That Asine did not itself get it directly from there, is seen, firstly, from the earlier types of vases, and secondly, from the kinds of patterns, both strangers to Crete but with near prototypes in the Cyclades. It was not until the close of the period that real contact between Crete and Asine can be safely demonstrated by shapes of vases adopted, freer decoration after Minoan prototypes, importation of Kamare ware, etc.

The basic colour varies from brownish-red to black, the red shade becoming noticeably rarer as time goes on, and the exact shade, like that of E. H. glaze-paint, depending on the degree of firing. The glaze-paint is throughout of a very good quality, even and without cracks, and, consequently, has very rarely flaked off the vase. It also has an excellent gloss.



The decoration has an exclusively geometric, linear character and, at first a great predilection prevails for straight lines, occasionally with rows of dots between the bands. Besides these, we meet arcs or crescent figures, and concentric circles. These patterns can be traced back to incised ware with the incisions filled with white pigment. Towards the end of the period somewhat more curved lines come in. Then we meet bands of large recurving spiral coils and vertical zig-zag lines, certainly the result of Minoan influence. Just the same motives were imitated in Egypt, B. M. Catalogue, Prehistoric Aegean Pottery, p. 94, fig. 115, and these, together with genuine Kamares ware, have been found at Kahun in deposits from the Twelfth Dynasty, and must thus be dated to the period before 1788 B. C., according to Meyer's dating.

The most interesting example of this style of vase is presented by a jar found in the Lower Town in the first trial excavations during the spring of 1922. It was found in the lowest M. H. stratum, at the transition to the E. H. deposit and contained the skeleton of a small baby; the mouth was covered by the upturned bottom of a coarse bowl which was fixed with clay (fig. 191; Colour-Pl. I). It had thus served for a pithos burial, Tomb M. H. 17, which explains its deep location, since it had been dug out below the M. H. II floor.

Jar. H. 0.38 m, d. 1.28 m. Ovoid body with flat base and a slight bulge near the rim. The rim is somewhat thickened. Two horizontal, round loop handles on the widest part of the body as well as two somewhat smaller vertical ones near the lip, not placed symmetrically in relation to the two horizontal ones. Coarse, red clay with strong, brownish-red glaze-paint, in some places turning to black. The whole surface of the vessel is divided by six broader or narrower bands into seven unequal zones. The broadest, lattice-filled band is slightly above the horizontal handles. In the zones above and below this appear figures in the shape of crescents, with a row of dots inside. The broadest zone, below the handles, contains a chain of lozenges with treble or quadruple outlining. The remaining zones contain zig-zags, likewise drawn several thin lines in groups. The top row consists of two such groups of zig-zag lines crossing each other irregularly. It is possible that a chain of lozenges had been intended, but had been wrongly drawn. On the whole, the drawing has been done without any very great precision or care, but betrays, nevertheless, a sure taste and rapidity of execution. — The shape of the body of the vase, with flat bottom and no neck, and the thickening of the rim, is typical of M. H. I and II. On the other hand, I know of no exact counterpart from here for the arrangement of the handles, nor of the decorative division into zones, from Crete. The Cyclades offer better material for comparison in the latter respect, cf. Phylakopi, Pl. VIII, 4 and Pl. X. Besides, it seems to me most likely that we have here to do with a purely mainland product based on external influences; for in the Museum at Nauplia there are some sherds from Mycenae, which display exactly the same technique and patterns: unfortunately, I have not been able to ascertain the precise circumstances of their discovery.

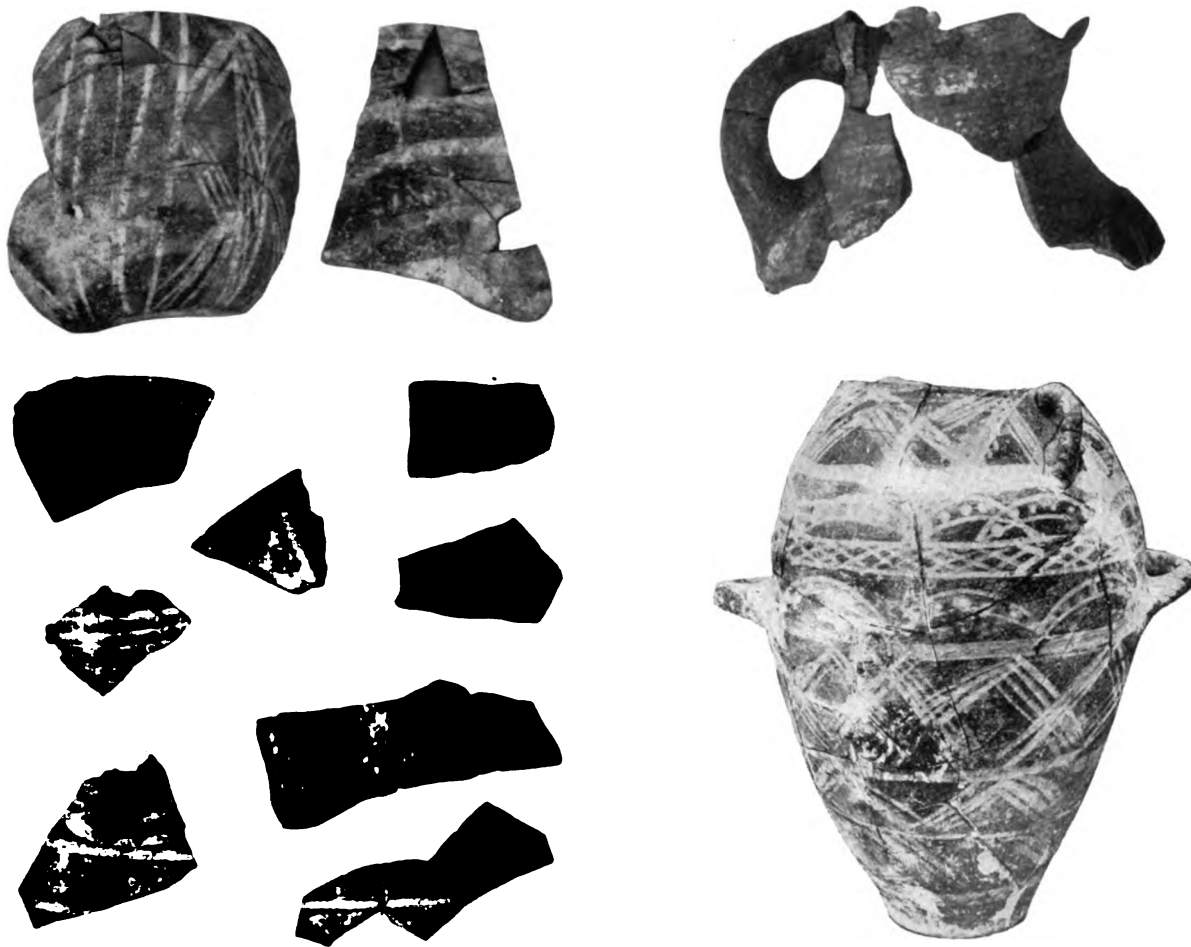


Fig. 191. M. H. II pottery. Light on dark ware.

A largish fragment, also found in the Lower Town, has a decoration very reminiscent of the vase described, yet with the difference that it is here applied in vertical zones.

Cup (?), fragment. H. 0.125 m, d. about 0.12 m. The body has straight vertical sides, curving inwards at the bottom to the flat base, and again slightly at the top to a rim that is in no way specially marked. Yellowish-brown clay with black glaze-paint. The decoration in matt, white colour and in lilac is applied vertically and is repeated three times. In the middle a fairly broad, lattice-filled band, on either side zig-zags drawn several thin groups of lines, then a narrower belt with a lilac band. Here, too, the decoration is effective, but bears witness to rapidity in execution and no very exaggerated demand for precision — some of the vertical lines are rather crooked. I know of no very near parallel for the shape of the vase in the Aegean area, and it gives a distinctly clumsy impression as to the decoration, the remarks

made above as regards the jar hold good also for the cup, since a merely vertical division is probably rare in the Cyclades.<sup>1</sup>

Beaked jug, fragment. Preserved h. 0.13 m, d. 0.21 m. Rounded shoulder without any marked transition from the body to the wide neck: round loop handle from rim to shoulder: short, shallow beak-spout. Greyish-brown clay, black glaze-paint. The decoration in matt white paint has partly disappeared: nevertheless it is possible to make out that the rim was edged with white: that two or three bands encircled the neck that on both sides of the lower end of the handle, on the shoulder, and upper part of the body, there had been large spirals (or perhaps concentric circles): and that on the front of the vase a decoration ran up from the base approximately to the angle



Fig. 192. Foreign ware from M. H. II and III layers.

of the shoulder — the ends of three groups of parallel lines, each one consisting of two lines, can be distinguished. — This type of vase, with its short, straight neck, probably corresponds to the M. M. II shapes like the one illustrated by Evans, *Palace of Minos I*, fig. 196.

Amongst the sherds found at Asine there are some that appear to come from Minoan vases. These are, however, only small sherds, and all from small cups. They are distinguished by their thin, fine walls of well levigated, yellowish clay. Fragm. No. 1 (fig. 192) comes from a cup of M. M. II type — cf. e. g. Evans, *Palace I*, p. 244, fig. 184 b. Below the rim it has a broad lattice-filled band, in the middle a plain band, and below that a chain of loops or S-scrolls. The cup was clearly made on the potter's wheel. Fragm. No. 2 is a piece of a rather hastily painted cup, cf. Evans, *Palace I*, p. 257, fig. 192 e. Fragm. No. 3, with its simple line decoration reminds one of a fragment in the British Museum from Palaikastro, belonging to M. M. II: A. 546, 5, cf. B. M. Catalogue, *Prehistoric Aegean Pottery*, p. 89, fig. 112; cf. also A. 623 from Petras, B. M. Catalogue, p. 101, fig. 129. Fragm. No. 4 is certainly Minoan and shows the Barboutine technique. A small base of a cup, which looks as if it bore the impression of a cut stone, is surely not Helladic, and I am very much inclined to add it to the Minoan imports. There remain on our fig. two further sherds, which might perhaps belong to M. H. III, both fragments of cups, with a strongly reddish glossy ground colour. Both are decorated with a fine double spiral band in a zone enclosed by plain white lines, this band being in matt white paint of the same type as occurs on matt-painted ware belonging to M. H. III. It is possible that these are imports from the Cyclades.

<sup>1</sup> In Crete, it occurs in M. M. II and III, cf. e. g. Evans, *Palace of Minos I*, p. 260.



*E. Brownish-yellow lustrous ware*

In M. H. II strata at the transition to M. H. III, and in tombs was found a peculiar hand-made pottery with a yellowish-brown lustrous surface of a leathery type, without decoration, represented by cups and small jugs of various kinds. What made us pay particular attention to this not very striking pottery, was the astounding similarity it displayed to a much later ware found in Proto-Geometric tombs together with typical Proto-Geometric and sub-Mycenaean pottery, and which is hereafter termed »Dorian pottery». The ware here in question, by analogy with this, is termed, »Achaean pottery».

From Terrace III, towards Terrace II from a purely M. H. II stratum comes an unfortunately fragmentary small jug.

Jug (fig. 193: 1); spout and handle are missing but the roots of the handle are in existence, and it has probably been reconstructed slightly too tall and large. H. of body 0.055 m, d. 0.045 m. Oval body with flattened base and marked transition from body to oval neck: high, rounded loop handle from rim to the middle of the body. Yellowish-brown, poorly levigated clay, polished surface; hand-made.

Cup, handle missing, from Terrace IV, pure M. H. stratum (fig. 193: 2). H. of body 0.06 m, d. 0.075 m, d. of base 0.035 m. Globular body with slightly out-turned lip and flattened base. The vertical handle was rounded and probably slightly higher than it has been restored. The surface of the coarse, yellowish-brown clay is highly lustrous; hand-made.

Cup, from Tomb M. H. 34 (fig. 193: 3). H. 0.065 m, d. of mouth 0.06 m, d. of base 0.035 m. Globular body with clear angle at shoulder, decorated by three faint rings, which give a false impression of being wheel-made, and with out-turned lip and flattened base; flat loop handle from rim to the widest part of the body. Brownish-yellow, fairly well levigated clay with polished surface. Close to the vase in the filling of soil in the tomb were found some pieces of Black and Grey Minyan, and a rough matt-painted sherd.

Side-spouted jug, from Tomb M. H. 32 (fig. 193: 4). H. 0.08 m, d. of mouth 0.06 m, d. of foot 0.045 m. Globular body with straight wide neck and flaring rim; horizontal, short spout below the neck and placed laterally, round loop handle from the neck to the largest part of the body: flattened foot with bulbous edge. Yellowish-brown clay with lustrous surface. Handle pressed a trifle into the lip. Hand-made. Resembles an imitation of leather.

From this fabric, a small toy vase also belongs (fig. 193: 5). H. 0.055 m, d. of mouth and base 0.015 m. This is decorated with small circles arranged in rows and perhaps imprinted with a straw. I know of no exact counterpart.

The vases here concerned find their closest analogies in Macedonia and Thessaly. Our jug is exactly like one from Macedonia, now in the British Museum, A. 81; cf. B. M. Catalogue, Prehistoric Aegean Pottery, Pl. III. The likeness is all the more striking

as in the same stratum were found vases of coarse ware, with characteristic oblong projections (fig. 193: 6, 7) of exactly the same type as a jug from Macedonia, which has three long bosses set vertically on the shoulder, B. M. Catalogue, Prehist. Aegean Pottery, A. 80, Pl. III. As a further support for the assumption of connection with Macedonia at this period, see the small triangular handle with vertical holes (cf. BSA, XXIII, Pl. III, 3) and the sherds with incised and pierced decoration which have their exact counterparts here (cf. BSA, XXIII, Pl. II, 3, 5). The Asine sherds were found in the same stratum as the so-called Achaean Ware. The same shapes are met with at Tsangli, in Macedonia, and nearly related parallels to all the vases occur at Tsangli in the characteristic monochrome wares designated by Wace and Thompson as I'3, other than »Minyan Ware», to which are referred not only »rude, hand-made vases» but also »hand-made vases of good fabric usually polished». It is just the latter category to which belong our Asine vases here referred to the »Achaean pottery». Compare Prehistoric Thessaly, p. 110, fig. 60 and p. 112, fig. 61. It is of particular interest that this type of vase is still in existence during M. H. III, and is found in quite large numbers in the Shaft Graves at Mycenae. There we find the small type of jug, etc. Cf. Karo, Ergebnisse, IX. We shall revert to this in the Conclusions.

#### F. Coarse Domestic ware

In this important group can be distinguished some types of vases which because of their shapes were especially used for pithos burials. As a rule, these are clearly domestic vases of a ruder kind — there are exceptions, as the light on dark vase already dealt with shows. As to the custom of burying in large vessels and its spread from Asia Minor to the world of Aegean culture, cf. below. We shall see that the assumption is also supported by the older kind of burial vessels, handleless storage jars, which were put to use.

1. Handleless storage jar, Tomb M. H. 7 (fig. 193: 8). H. 0.475 m, d. 0.36 m, d. of mouth 0.31 m, d. of base 0.13 m. Pear-shaped body with flattened, narrow base and wide mouth with out-turned rim. Coarse, red clay.

2. Handleless storage jar, found in House T on Terrace III (fig. 193: 9). H. 0.395 m, d. 0.29 m, d. of mouth 0.255, d. of base 0.08 m. Shape as last. On the shoulder, three small bosses set vertically. Coarse, red clay.

3. Handleless storage jar, found in eastern part of Lower Town, close to Tomb M. H. 20 (fig. 193: 10). H. 0.27 m, d. 0.24 m, d. of mouth 0.20 m, d. of base 0.07 m. Shape as last, but lower. Part of rim missing. Three small bosses set vertically on the shoulder. Coarse, red clay. Traces of smoke and fire on the middle of the body of the vase: probably used as a cooking pot.

4. One-handled (?) household jar, found on Terrace IV, northern part (fig. 193: 11). H. 0.27 m, d. 0.29 m, d. of base 0.08 m. Globular body, tapering slightly towards the small foot, which consists of a round disc with tapering sides; at the mouth a



Fig. 193. M. H. II pottery. Brownish-yellow lustrous ware (1—7). Coarse ware (8—11).



vertical rim. Probably only one round loop handle, set vertically from shoulder to the widest part of the body: for shape, cf. a burial pithos from Phylakopi, BSA XVII, Pl. IV, No. 209. Coarse red clay, with considerable traces of fire and smoke.

5. Flat pan, found in the Lower Town, Square D 6. H. 0.055 m, d. 0.33 m. The rim, which slopes upwards a little, has two loop handles set horizontally on the edge. Reddish-yellow, coarse clay with polished surface.

6. Jug, Tomb M. H. 80 (fig. 194: 1). H. 0.105 m, d. 0.90 m. Globular body with flattened base and with neck slightly rising from body and an out-turned rim; large, flat loop handle set vertically from below the rim to the broadest part of the body. Reddish-gray clay with polished surface, which has partly flaked off. Hand-made.

7. Cup, found together with Jar No. 3, below level of Tomb M. H. 20 (fig. 194: 2). H. 0.085 m, d. of mouth 0.09 m, d. of foot 0.045 m. Globular body with raised flat base and with wide mouth with out-turned rim; high, round loop handle rising from the rim, which is drawn in at this point and joins the body at its broadest part (missing, but to judge from the shoulders of exactly the same shape as on the next one). Coarse, brownish-red clay, blackened by fire; hand-made. On the shoulder, below the rim, three small bosses.

8. Cup, found on Terrace III in House T (fig. 194: 3). H. 0.095 m, with handle 0.12 m, d. of mouth 0.105 m, d. of base 0.045 m. Shape as last, but tapering more towards the base and more open at the mouth. Coarse red clay, blackened by fire; hand-made. On the shoulder, three small, plastic, round bosses in the shape of rivet-heads.

9. Cup, found in Tomb M. H. 20 (fig. 194: 4), H. 0.125 m, d. of mouth 0.125 m, d. of base 0.045 m. Shape of body as last, but taller. The rim rises more vertically, the handle is missing but was of the same type as the preceding; base merely flattened. Coarse red clay, with strong traces of fire, burnt opposite the handle. Probably wheel-made, which explains the new shape of the base. On the shoulder, the same plastic bosses as the preceding one.

10. Cup, found in a mixed stratum on Terrace III. H. 0.115 m, d. of mouth 0.115 m, d. of base 0.06 m. Conical shape, narrowing slightly towards the mouth but with offset rim; flattened base. Only the lower join of the handle is left, and this is set relatively low and scarcely permits the reconstruction of a high loop handle, as on the preceding one. Coarse, brown-black clay, with a strong admixture of straw; lustrous surface which has partly flaked off; hand-made. On the shoulder are plastic bosses, two in front, one on each side. Belongs possibly to M. H. I.

11. Cup, found in Lower Town, Square E 6. H. 0.11 m, d. 0.12 m, d. of base 0.06 m. Globular shape, with flattened bottom and offset rim; vertical, round ring-handle set on shoulder part of body. Coarse, brownish-red clay with considerable traces of fire. On the shoulder had been three or more relatively large bosses.

12. Lid, found in Square H 4 about 2.5 m below the surface (fig. 194: 6). H. 0.03 m, d. 0.055 m. Flat, hand-made, with elongated point on centre of upper side. Reddish



Fig. 194. M. H. II pottery. Coarse ware.

clay. — The same type of »Flachdeckel« is well known from, for example, Troy; cf. Schliemann's *Sammlung Trojanischer Altertümer*, Index s. v. »Deckel«.

A few sherds of a large open pithos are also worthy of interest. The rim-piece (h. 0.08 m) shows an open strongly Minyanised shape without however a sharp shoulder profile, but with a clear break at the transition to the side of the body of the vase. The lower part (h. 0.085 m) tapers rather sharply to a narrow base. The clay is brown and the surface very lustrous.

Sherds with incised lines occur in M. H. II, as in other M. H. strata. These are of coarse ware, probably from cups cup-shaped. One fragment shows the lower part of one such with typical M. H. II raised, flat base. This fragment, which perhaps belongs to M. H. I, shows hatched triangles, a pattern that is well known from the Cyclades in incised technique, cf. *Phylakopi*, Pls. IV, V.

To the M. H. stratum also belong some bases with potters' marks incised before

firing. We have already drawn attention to handle with such a mark, cf. fig. 183 B: 19, of the same kind as occurs at Phylakopi, in Edgar's synopsis, table F 13.<sup>1</sup> Also the marks which occur on the bases are of the same kind (fig. 195).

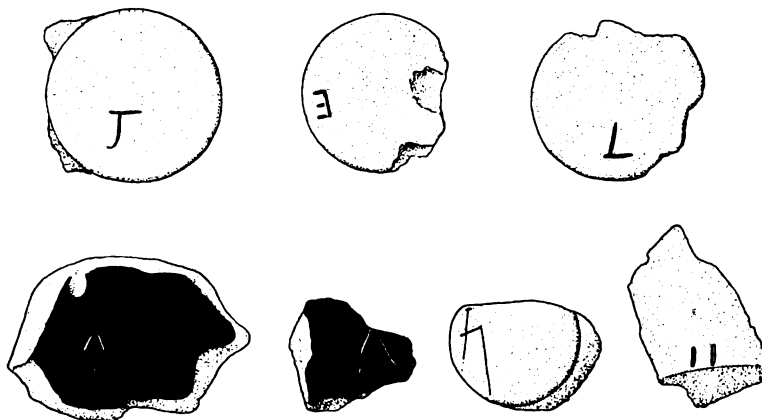


Fig. 195. M. H. II pottery. Coarse ware with potter's marks.

1. At the edge on the flattened base with indistinct impression of a mat, there are two parallel dashes, Edgar's type A 4.

2. On a typical flat raised base there occurs a mark that reminds one of an E. This should however probably be seen from the rim as Edgar's B 11, i. e. with the long side lying horizontally at the top and the three short lines vertically below it.

3. On another similar base we meet, likewise seen from the rim, a slightly curved horizontal dash and issuing from this obliquely upwards to the right, another long hasta. Cf. Edgar, B 6, C 13, and 14.

4. A similar base has, seen from the rim, a T-shaped mark with straight horizontal hasta and a vertical dash, curving to the left reminiscent of Edgar's type B 7.

These marks are of importance as evidence, supported by other facts, of close intercourse with the world of Cycladic culture during the period here under consideration.

### MIDDLE HELLADIC III

Of great importance for determining the synchronism of different kinds of styles is a find that was made in a higher stratum in House B in the Lower Town. Fig. 196 shows the circumstances of the find and fig. 197 gives an idea of the varying nature of the vases. As the house here concerned had at least one storey above the ground-floor, it is very probable that the collection of vases here referred to originates from the upper storey, and on the demolition of the house became mixed with the accumulation of rubble and clay in which they were found. Before we enter into particulars of the M. H. III pottery, a synopsis of this find may be of importance.

<sup>1</sup> Phylakopi, p. 179, table of signs.



Fig. 196. M. H. III pottery *in situ*.





Fig. 197. M. H. III pottery.

Minyan Ware. It is of importance for the understanding of conditions at Asine to state first, that Black and Grey Minyan are missing. On the other hand, the coarse, Yellow Minyan ware is represented by two high goblets.

1. Stemmed goblet, foot missing, Yellow Minyan ware (fig. 198: 1). H. about 0.275 m, d. 0.26 m. Tall shape with unmarked transition from stem to bowl, and sharp contraction below the rim, which then flares out above a hollow ring. Small, flat loop handles below the rim. The stem was decorated with a lightly-drawn spiral line, which also surrounds the lower part of the bowl. Coarse, yellow clay with polished surface. The upper part appears to have been wheel-made.

2. Stemmed goblet, Yellow Minyan ware (fig. 198: 2). H. 0.235 m, d. 0.27 m, d. of base 0.12 m. Wider and lower shape, but otherwise like last.

3. Of Minyanised shape is a fragment of a red, slipped vase, which nevertheless cannot with certainty be said to belong to the rest of the find. Certainly hand-made.

Matt-painted ware is represented in this find only by —

4. Some large fragments, including the neck and two handles of a large, two-handled jar. The clay is reddish, the decoration, which is done in black paint, was, to judge by the fragment preserved, confined to purely linear ornament. Not wheel-made.

Glaze-painted Ware is represented by an excellent, but unfortunately fragmentary, specimen; fragments reaching from the base to the mouth nevertheless exist.

5. Jar (Colour-Plate II). H. 0.315 m. Globular shape with flattened base and with raised neck, which joins the body without marked transition, but forms a hollow ring with a spreading rim. Yellow clay, with high lustre produced by a tool that has left distinct traces. The vase is certainly hand-made. The lower part of the body of the vase shows the natural colour of the clay, the upper part, together with the shoulder and neck, is coated with glossy, blackish-green varnish, on which a pattern was applied in matt white and lilac. At the transition to the shoulder is a band in white with oblique, parallel bars in a lilac shade between two lilac enclosing lines: below this a wavy band with high loops between 2 lilac bands. On the shoulder appears the main decoration, which consists of a floral motive, large pair-lobed leaves in soft lines and round flowers, in lilac, meet, and with wavy lines as filling. We shall return hereafter to a close characterization of this ware.

To this find also belong two jugs of different kinds.

6. Beak-spouted jug (fig. 198: 3). H. 0.19 m, d. 0.135 m. Globular shape with flattened base and low neck, which rises in a gentle line from the body; round loop handle from the neck to the broadest part of the body; small, upright beak-spout. The surface is finished with greyish-lilac slip and the ware is fired hard, of a type which otherwise does not occur at Asine. It seems to correspond exactly to a ware from Alishar-Hüyük, Stratum II, and the colour on our jug is exactly the same as on pitcher b. 1671, reproduced in colours in Schmidt, Alishar-Hüyük 1928—1929, Pl. IV. It seems highly probable that we have here an Anatolian imported article. Certainly hand-made.





Fig. 198. M. H. III pottery. Minyan ware.

7. Beak-spouted jug (fig. 198: 4). H. 0.145 m, l. 0.10 m. Globular shape with flattened base and low neck more sharply set on the body than in the preceding one; small, round loop handle rising from the rim of the neck and terminating on the lower part of the shoulder; very much elongated (broken-off) beak-spout. Dull-black clay; no traces of potter's wheel, but extremely symmetrically constructed. On the shoulder, below the beak-spout, two rudimentary nipples, on the beak-spout two corresponding plastic eyes or ears. A connection with the Trojan »Gesichtsvasen, Typus a» seems obvious. It is just the beaked jugs in the Cyclades that have a corresponding plastic decoration; cf. e. g. Phylakopi, Pl. XIV, while the pottery from the Greek mainland of this period has, as far as I am aware, no counterpart to it. At any rate, our jug points to the East, to the Cyclades and Asia Minor.

After this synopsis of a closed find we shall pass on and deal with each category of vase separately.



*A. Minyan ware*

The Minyan ware shows a distinct tendency to lose its sharp shapes and forms again and to pass over more and more to soft lines. The disappearance of the Grey Minyan ware with M. H. II is specially characteristic of the culture at Asine — it is not met with in the shaft-graves at Mycenae. It seems as if the new feature we have traced in the so-called Achaean pottery, with its brownish-yellow surface, must have influenced the general taste, and furthered the production of Yellow Minyan. One typical transition vessel exists.

1. One-handled cup, wheel-made; Terrace III, east of Wall 17 (fig. 198: 5). H. 0.085 m, with handle 0.095 m, d. 0.12 m, d. of base 0.055 m. Conical body; high foot; angle between body and shoulder; upright rim curving outwards; one high, broad vertical handle, rising from edge of rim to angle between body and shoulder. Leathery, brownish-yellow, polished surface.

2. Two-handled bowl, Yellow Minyan; wheel-made (?), Terrace III, west of House U (fig. 198: 6). H. 0.105 m, d. of mouth 0.145 m, d. of base 0.06 m. Low globular shape with flattened base and soft transition between body and shoulder, with out-turned rim; two flat loop handles on the shoulder below the rim to the broadest part of the body. Fine, reddish clay, with excellent yellow polish.

3. Fragment of a similar Yellow Minyan bowl (fig. 198: 6). H. 0.08 m, wheel-made, representing a further development of the preceding type in the direction of those common during the Mycenaean period, as is seen from the shape of the handle, set on the rim. Fine, yellow clay with excellent, glossy surface.

4. Goblet, coarse Yellow Minyan ware, hand-made; Lower Town, Square E 3, M. H. stratum. H. 0.21 m, d. 0.21 m, d. of base 0.105 m. Funnel-shaped body, with spreading foot; sharp angle between body and low shoulder, with out-curved rim. Two small handles from the rim to the upper part of the body. Close spiral band from angle of foot to half-way up the body of the vase. In this goblet we have a further development of the two illustrated above fig. 198: 1—2, where there is still a little of the stem left. A further stage in the development is represented by the following:

5. Goblet, coarse Yellow Minyan ware, hand-made; Terrace III, above House T. H. 0.20 m, d. 0.20 m, d. of base 0.10 m. Shape, a development of the last but with curved sides, sharper angled, spreading foot, abrupt angle between body and high shoulder, and out-curved rim. Two flat handles from rim to shoulder angle. The more sharply defined and better articulated foot marks a transition to the stemmed goblet of the Mycenaean period.

6. Goblet, Yellow Minyan ware, hand-made; Lower Town, Square E 6 (fig. 198: 10). H. 0.105 m. From a spreading foot the sides of the vase rise obliquely upwards with a gentle transition to a vertical upper part without pronounced angles at shoulder or rim. Two (?) small, broad handles, set on the upper, vertical part of the side. This

straight type with low-set handle constitutes another link between Minyan and Mycenaean shapes. More pronounced Minyan handles, are also found in Yellow Minyan ware, set on straight or faintly curved sides.

7. One-handled jug, coarse Yellow Minyan ware; Terrace III, above House T (fig. 198: 11). H. 0.285 m, d. 0.24 m, d. of base 0.09 m. Carinated body, low neck, and roll-rim; one flattened loop handle from neck to shoulder.

A few fragments show us excellently polished Yellow Minyan ware, hand-made, with linear decoration in matt, brownish-lilac paint. This ware thus marks the transition to the matt-painted class. The shape is the same as fig. 198: 7, except that the handle issues horizontally from the lip, and then spreads or widens outwards.

#### B. *Matt-painted ware*

The matt-painted ware belonging to M. H. III is divided into two groups, the first, A, with matt paint, black or brownish-lilac, and the second, B, with two matt colours, black and lilac. The decorative schemes, are much alike; but those of type B are more rectilinear on the whole than those of type A, clearly because the use of two colours in straight lines produces an attractive effect. It is of the latter group that the polychrome glazed ware — to use Blegen's rather incorrect terminology — with its changing colours is probably the immediate continuation, and with the natural ground colour of the clay a certain polychromy is of course achieved. That both kinds belong to the last stage of the M. H. period, is seen both from the stratigraphy and from the finds in the shaft-graves at Mycenae.

A. The former matt-painted type is a direct continuation of M. H. II and there is no difference between II and III, except in the finish and fineness of the ware, the greater freedom and variety of the patterns, and the introduction of new vase-shapes. In fig. 199 are seen Nos. 1—14, pieces of rims with various patterns. Nos. 1—6 all come from cups or small bowls with more or less offset rims. Nos. 1—2 show direct connection with M. H. II in the patterns of straight lines and pendant arcs crossing each other. Nos. 3—4 have spiral pattern or S-scrolls of different types; No. 5 has a continuous wavy line. No. 6 has, instead of the wavy line, a continuous pattern of loops turning to the left, »laufender Hund». The fragments 7—14 come from cups of Minoan shape, even if the decoration is typically Helladic, with matt-paint. No. 7 shows alternately filled and plain triangles in a zone below the rim, the plain ones being point downwards. No. 8 has merely a strong wavy line without enclosing bands. No. 9 has groups of concentric semicircles in the zone below the rim. No. 10 has instead running spirals. No. 11, which is of remarkably fine, greenish yellow ware, has a thin wavy line just below the rim and a thicker one in the zone below the rim which is delimited at the lip by the thin wavy line. In No. 12 an area filled with dotted lines is enclosed by larger dots round its edge. Nos. 13 and 14

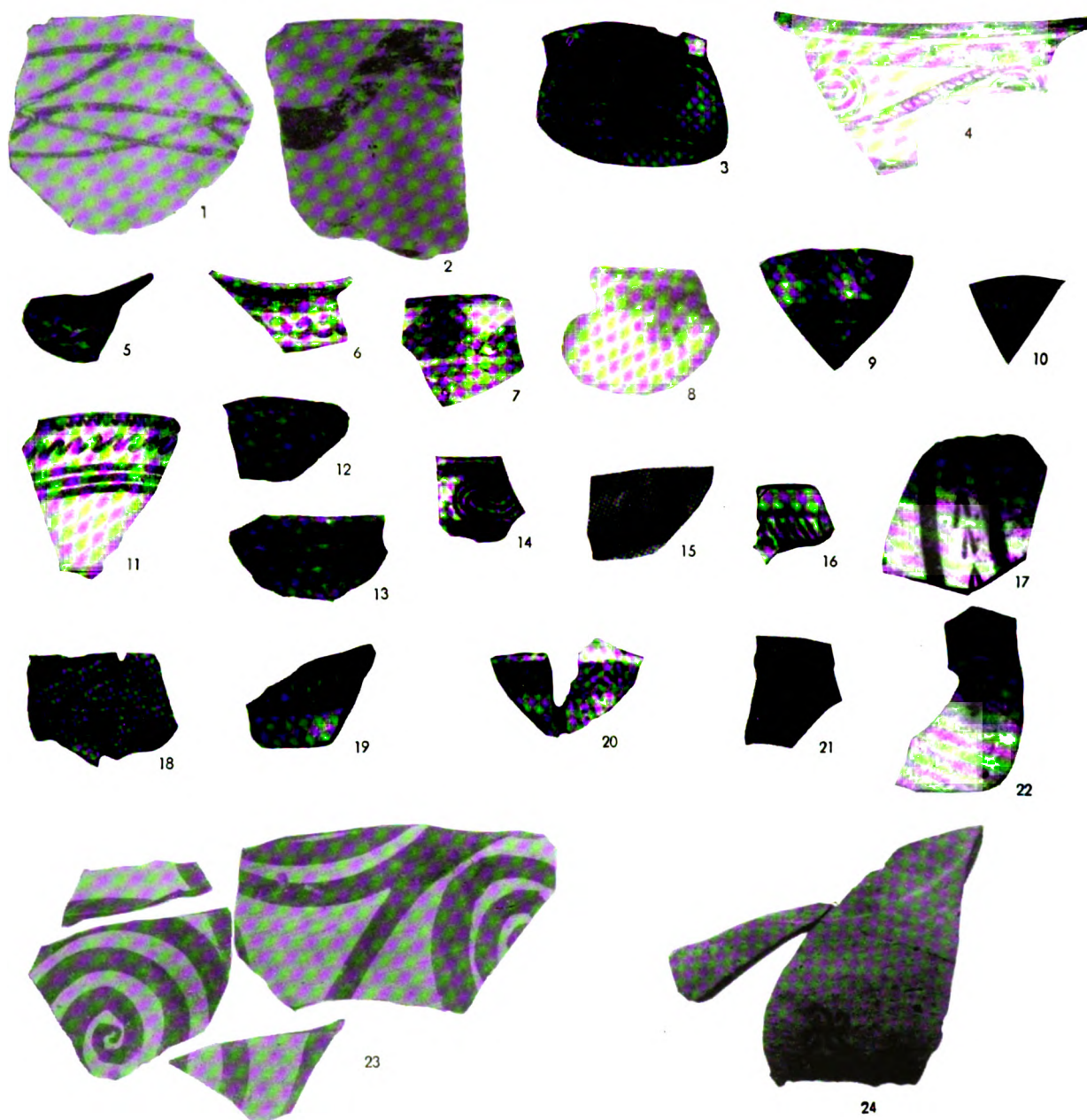


Fig. 199. M. H. III pottery. Matt-painted ware.

where the shape is concerned, form a transition between the two types of cups dealt with above. No. 13 has groups of concentric arcs below plain bands. No. 14, finally, a developed pattern of spiral bands.

As regards the other sherds, they present a great wealth of different kinds of patterns. Nos. 15—16 show a type of decoration rare on the mainland, but common in the Cyclades; cf. similar hatched figures for example from Phylakopi, Pls. XII and XIII.



Hooks, triangles, zig-zags, concentric arcs and circles, spirals with or without plain eyes are all patterns that occur. To these must be added hooked crosses with dots between the arms. Especial mention should also be made in this connection of a fragment bearing the lower part of a black bird.

We shall then look at some whole vases belonging to matt-painted A, beginning with a closed find in an M. H. tomb uncommonly rich in burial ware, No. 18 in the eastern part of the Lower Town, sunk in a wall belonging to House B.

1. Cup (fig. 200: 1). H. 0.095 m, with handle 0.125 m, d. 0.145 m, d. of base 0.055 m. Wide mouth and narrow spreading foot, the sides sloping gently from raised base, sharply from lip, and meeting at an angle; the upper part has a wide, offset rim; one round loop handle set horizontally on the rim, which is slightly contracted at the join; greenish-yellow clay. On the inside of the rim are some groups of lines,

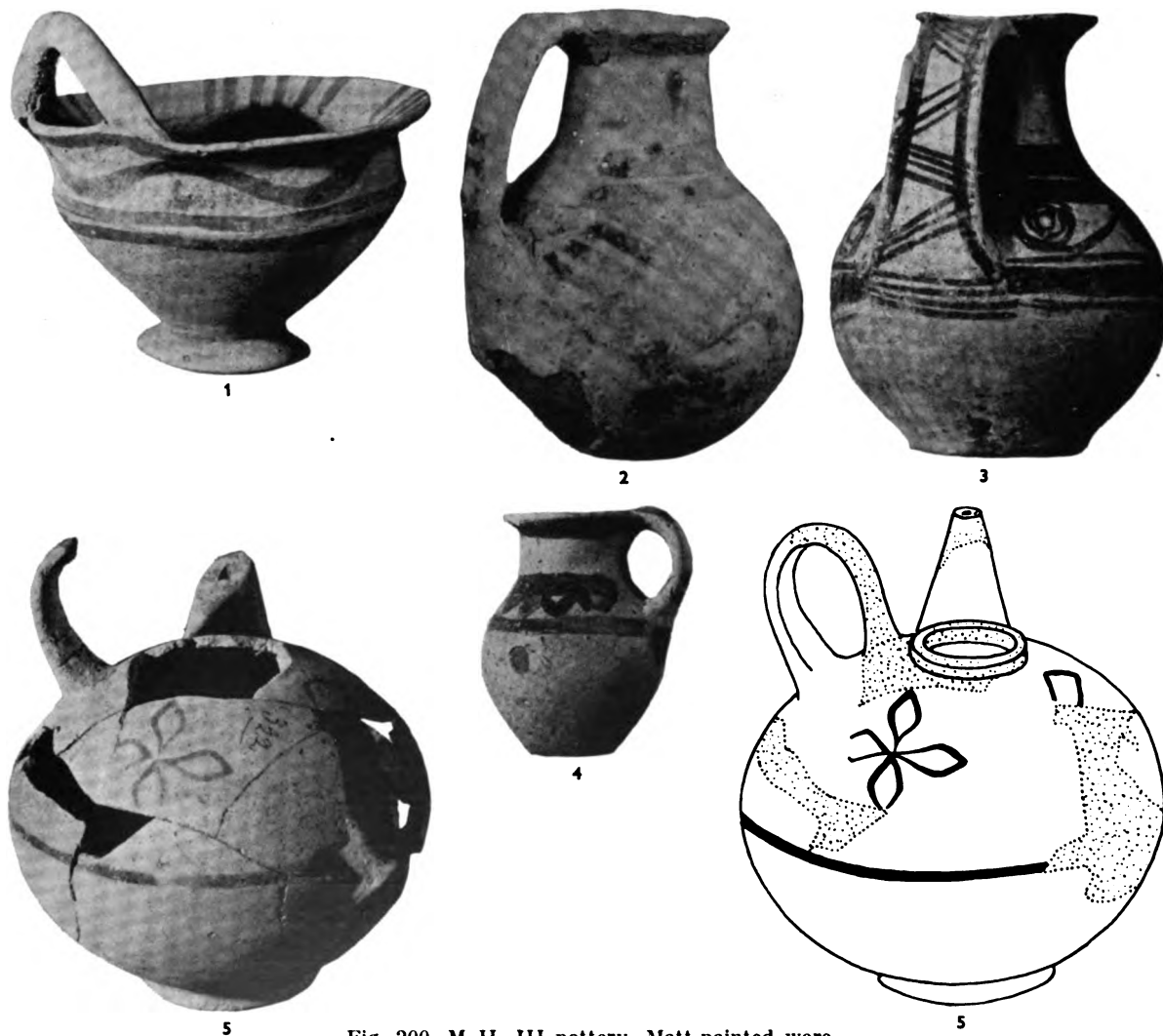


Fig. 200. M. H. III pottery. Matt-painted ware.

and the handle is similarly barred. On the upper part of the body is a wavy line between enclosing bands; below the angle of the vase another band; round the foot, a band, underneath the foot a double-drawn cross. The body of the vase, which is wheel-made, is set somewhat obliquely on the foot, so that the whole vase is crooked.

2. Jug (fig. 200: 2). H. 0.11 m, d. 0.085 m, d. of base 0.035 m. Globular body with flattened base and wide neck slightly tapering upwards with out-turned rim and a broad handle from rim to the broadest part of the body. Red clay with thick, yellow slip has partly flaked off. Below the lip one, and below the neck two, broad bands and then three birds flying to the right; on the handle, groups of bars. Hand-made.

3. Jug (fig. 200: 3). H. 0.115 m, d. 0.85 m, d. of base 0.045 m. Globular body with flat base, only slightly accentuated, and with neck tapering upwards and out-turned rim; broad handle from rim to body. Yellow, strongly lustrous surface like Yellow Minyan. Below the lip a band with serrations at its lower edge, and below the neck two broad bands, after that tangent spirals and, as the lower limit of the shoulder panel, a broad band between two narrow ones. The handle has lines painted at the edges, between these a fourfold zig-zag band and at the base, where it joins the body, a group of four thin lines. Hand-made.

4. Jug (fig. 200: 4). H. 0.075 m, d. 0.055 m, d. of base 0.025 m. Oval shape with flattened base and wide neck with out-turned rim: flat handle from rim to shoulder. Reddish clay, greenish-yellow slip with polish. Below the rim a broad band, on the shoulder a wavy line between two bands; on the handle and on the inside of the rim groups of lines. Hand-made.

In the Lower Town, in the west, in the neighbourhood of the Proto-Geometric tomb No. 23, at a depth of 2.60 m. below the surface, in the highest M. H. stratum were found the fragments of an extremely interesting matt-painted vase.

Side-spouted jug, part of a handle, spout and mouth missing (fig. 200: 5). H. 0.10 m, d. 0.12 m. Globular body with raised base; one high flat loop handle on shoulder, straight upright spout set on at the side. Greenish-yellow clay, wheel-made. A plain band round the middle of the body; on shoulder flowers with four petals and on both sides of the spout a single spiral; spout and foot outlined by a band. The shape has been reconstructed in a drawing (fig. 200: 6); upper part of shoulder as well as angle of rim visible on the pieces preserved. This is a singular shape for which I know no parallel in the area of Aegean culture, but on the other hand a similar form has been found in Anatolia, at Alishar-Hüyük, during the excavations of 1931, an outline drawing of which is also given here (fig. 201).<sup>1</sup> There the shape can be explained as a descendent of some such type as the one illustrated in Alishar-Hüyük 1928—1929, Pl. III, b. 1425, whereas it might be difficult to explain in a natural manner its occurrence in an Aegean context. I therefore see in the shape Anatolian influence. As regards the decoration, it shows a certain similarity to some Cycladic patterns, cf.

<sup>1</sup> Cf. Arch. Anzeiger, 1932, p. 222, Abb. 25.

Phylakopi, Pls. XIII, 6 and XVIII, 8, the latter termed there Early Mycenaean.

Particularly worthy of mention is a choice fragment of a matt-painted cup of fine ware (fig. 202).

Cup, fragment found in southern part of Lower Town, in M. H. stratum. H. 0.12 m. Conical shape. Greenish-grey clay. Naturalistic decoration of leaf-sprays with pointed heart-shaped leaves. The nearest parallel I can find is in the Cyclades, Phylakopi, Pl. XVII, 32, on a fragment described as belonging to an Early Mycenaean panelled cup. The same decoration — but in glaze-paint — is also later very common on Mycenaean vases. The Asine fragment is undoubtedly amongst the very best examples of matt-painted ware, and it is very probable that we have here an imported article.

Also amongst the better M. H. III products is a fragment of a small, thin-walled

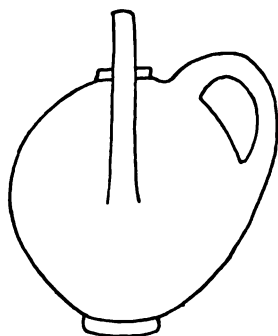


Fig. 201. Side-spouted jug from Alishar-Hüyük.



Fig. 202. M. H. III Matt-painted cup.

cup. H. 0.047 m, which has its exact counterpart in one found at Eleusis, cf. *Ἐλευσινιακά*, p. 94, fig. 74. Our fragment was found above Room V of House B.

B. The other class of matt-painted pottery with two matt colours is, numerically, less common than the type just described painted in only one colour. Nevertheless, it is far from rare, but both the vase-shapes and the patterns of the decorations are rather limited at Asine. The commonest shapes are the open, shallow bowl, the jug, and the two-handled jar. The patterns are, as a rule, only linear, with painted bands in the two colours, often close together, and groups of lines horizontally or vertically with one or more wavy lines or zig-zags as freer decoration (fig. 203: 1). Furthermore, there occur bird-motives of the same kind as in Shaft-grave IV at Mycenae; for the origin of these vases; cf. Karo, *Schachtgräber*, p. 254. We have fragments of a large, two-handled jar of reddish, finely levigated ware with a pattern of birds in two colours, but as far as can be seen with little use of inside filling-ornament.

A bird jug comes from Tomb M. H. 4, in the Lower Town, below the floor of Room XXII in House E.

Jug (fig. 203: 2). H. 0.135 m, d. 0.10 m, d. of base 0.05 m. Oval shape with flattened base and low neck without sharp transition from the body, but out-turned rim;



flat handle from rim to body. Reddish clay with yellow polished surface. One band below the rim, three at the transition from neck to shoulder, the lowest having pendant drops; below that three birds flying to the right, with plain lilac bodies; the handle is decorated with bars and parallel lines. Hand-made and with a somewhat rounded base so that it does not stand very steadily.

#### C. Glaze-painted ware

This ware is further developed during M. H. III along freer lines, chiefly in so far as the decoration is concerned. Here, as in matt-painted ware, a certain naturalism makes its appearance and flower calyces especially with many petals, occur beside freer, geometric patterns. But it is worth while pointing out that the polychrome variant met with during M. H. II seems to have died out — in this connection I wish to draw attention to the fact that the well-known fragments from the shaft-graves at Mycenae do not come from inside any tomb but from the filling above the tombs,<sup>1</sup> and are, therefore, no evidence of the existence of the technique during M. H. III. Everything rather indicates that during this period potters were content with only white on a coloured ground, usually of black varnish, and it is this same technique that survives into L. H. I, as it has been described by Blegen and Wace. The difference between M. H. III and L. H. I on this point is that during the former stage the matt white colour is applied as a pattern on a completely coated background, during the latter it is applied on a pattern in glaze-paint that has already been executed.

#### D. Coarse ware

Coarse ware is found, of course, on a proportionately large scale also during this period. Here are reproduced only a few characteristic types, which, as far as I have been able to judge, first appear in M. H. III.

Hydria, Tomb M. H. 12, found in the Lower Town, Square D 6 (fig. 203: 3). H. 0.45 m, d. 0.38 m, d. of mouth 0.17 m. Globular body with slightly raised foot and high neck with roll-rim; at the broadest part of the body two horizontal, round loop handles; from rim to shoulder one broad, flat handle. Greenish clay without decoration. Probably wheel-made. The shape survives in L. H., though, as a rule, it is slimmer.

Cup, found in Square E 7 of the Lower Town (fig. 203: 4). H. 0.08 m, d. 0.12 m, d. of base 0.055 m. Conical shape with curved sides and raised base; contracted below the low rim; the handle is restored. Coarse red clay with distinct traces of blackening by fire.

Fig. 203: 5 shows a horseshoe-shaped base open on one side, which has been joined to a cup and used as a cooking pot; found in the Lower Town, near the preceding one. H. 0.065 m, d. of base 0.10 m. The sides slope gently inwards. At the upper

<sup>1</sup> Cf. Karo, *Schachtgräber*, p. 252.



Fig. 203. M. H. III pottery. Matt-painted (1—2) and Coarse (3—5) ware.

edge, two oval openings in the wall; half-way up the side three oblong, horizontal bosses. Originally, glowing coals were placed below a cup supported by this stand, the oval openings serving as draught-holes. Similar, whole specimens from the Cyclades are on exhibition in the National Museum at Athens.

## LATE HELLADIC

During the Mycenaean period, i. e. during the Late Helladic period, settlement at Asine was fairly extensive. On the acropolis have been found remains of some strata just south-west of the main entrance, where a trench had been dug through the accumulations of soil close to the Hellenistic surrounding wall, but so far the excavations have not been carried out on such a scale as to embrace the whole building complexes. In the northern part of the Lower Town, on the other hand, a large area has been excavated right down to Mycenaean levels, and there the work has stopped for the time being—in the southern part to Middle Helladic strata, and, consequently, the transition from Late to Middle Helladic is also represented.

When taking into consideration the pottery finds from Asine one is at once struck by the way in which the first eras of the Late Helladic period, Late Helladic I and II are presented by their characteristic pottery. Occupation layers proper, nowhere appear, and wherever they occur it is in connection with sherds with simple, linear decoration of the kind looked upon as typical of Late Helladic III.

The oldest Mycenaean ware is a direct development of Middle Helladic Yellow Minyan. This can most easily be proved in the case of the undecorated stemmed goblets, which in shape also are a continuation of the Middle Helladic goblets. On pottery of this type are also found patterns in lustrous paint with further lines and dots added in white pigment — Wace's and Blegen's typical Late Helladic I style. But at Asine such sherds are rare, and this holds good equally for the Late Helladic II sherds.

#### LATE HELLADIC I AND II

Some typical L. H. I sherds found in the Lower Town could be put together so that we have the greater part of a globular cup, h. 0.075 m (fig. 204: 1). Smooth yellow surface with brilliant reddish-brown varnish and dull, white paint. Broad band of running spirals on the shoulder, as on examples from Crete (Mirabello, Knossos, Palaikastro, Zakro, Petras) and Mycenae.<sup>1</sup> The spirals have large central discs and rows of white dots. The inside and the lip is covered with varnish, and between the base and the running spirals are three bands.

To the same period probably also belongs a stemmed goblet, Terrace IV (fig. 204: 2). This is comparatively very low, h. 0.095, d. 0.12 m. The body is a deep, round bowl and the stem is very short; the foot is domed, one flat loop handle (missing)

<sup>1</sup> Cf. B. M. Catalogue of the Greek and Etruscan Vases, A. 637, 653, 672, 686, 693, 759, 1.



Fig. 204. L. H. I pottery.



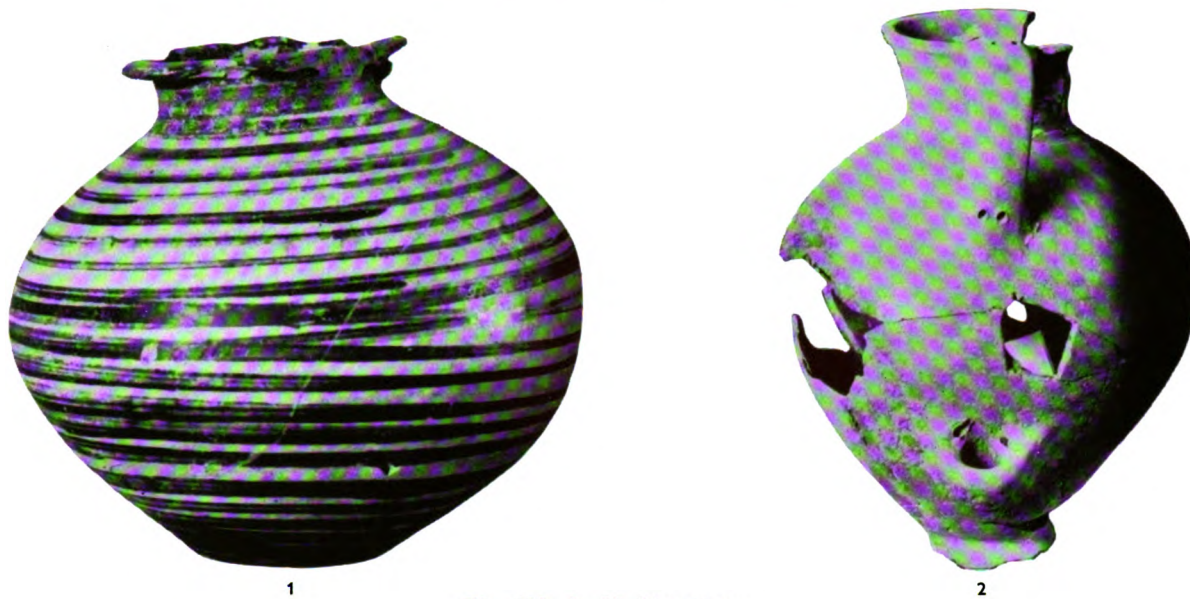


Fig. 205. L. H. II pottery.

emerges vertically from the offset rim. Smooth, pale yellow clay with lustrous surface, no painted decoration. The shape is a further development of the local Minyan, of which we have had examples before, cf. also above fig. 198: 9. Usually all examples of this type of vase, stemmed goblet, on the mainland are referred to L. H. III, but this does not agree with the facts, as the golden stemmed cup from the fourth shaft-grave at Mycenae has already shown. The sharply offset rim as well as the entire shape seem to indicate that the stemmed goblet was originally created in metal.<sup>1</sup>

Of typical L. H. II sherds both those with floral designs and with stippling are represented, though neither kind occurs in very large numbers. Possibly transitional, L. H. II—III, — a small globular jar (fig. 205: 1), h. 0.09 m, d. 0.10 m, found on Terrace II, near Tomb M. H. 97. Slightly flattened, globular body with small, flat base and short, narrow neck with lip turned outwards. Yellow clay with very smooth surface and lustrous, brownish-black varnish. Foot and neck painted, and the whole of the body closely ringed with narrow bands irregularly drawn. In the British Museum, there is a perfect parallel to this vase, A. 755, — this comes from Enkomi and has by Forsdyke been classified as L. H. I, with reference to L. M. I prototypes.<sup>2</sup> I do not believe that this dating is correct, especially as other vases from Enkomi, found in the same tomb, by Forsdyke are dated to L. H. III. It is certain that the two vases, the one from Asine and the other from Enkomi, belong together, but it is impossible to say whence they come.

<sup>1</sup> Cf. Forsdyke, B. M. Catalogue, p. 152.

<sup>2</sup> Cf. B. M. Catalogue, p. 130.

From the Lower Town comes an interesting hydria (fig. 205:2), a translation into clay of the well-known bronze hydriae. H. 0.29 m, d. 0.21 m. The body has a swelling curve with a cylindrical, somewhat spreading neck, and spreading, flattened foot. A flat vertical handle from rim to shoulder, another horizontal handle below this on the lower part of the body; both handles are pierced at their fastenings to induce better firing. Red, coarse clay, undecorated. The shape is found throughout the Mycenaean period in bronze, cf. the Shaft-graves at Mycenae, Chamber-tomb 5 at Asine, and Chamber-tomb 3 at Dendra; and that our specimen should be dated relatively early in the period, is apparent from the foot, which is chiefly characteristic of M. H. III.

### LATE HELLADIC III

#### *Pottery*

The closed finds from this period are not only confined to tomb-groups which are dealt with elsewhere, but we have also a collection from Square H 14, in Room XXXII of House G, which is also of the utmost interest in other respects. Only the vases will be dealt with here and for the other objects cf. p. 308.

The repertory of shapes found is typically late but extensive in comparison with the number of vases (fig. 206):

1. Jug, found with the neck downwards, wedged between the stones in the cult ledge. Bottom missing, and probably already in the same spot where it was placed on the ledge. Preserved h. 0.24 m, d. 0.22 m. Flattened, globular body with round neck turned out and upwards in a hollow curve, large loop handle set vertically from shoulder to top of neck. Reddish clay, with thin, light yellow slip and brownish-black varnish. On shoulder a «necklace» of short, drooping dashes radiating from a band round the lower part of the neck. On body groups of three and two plain bands, another band at upper end of neck. The rim is edged with paint, the handle has a vertical band; inside the rim a band.

2. Triple bowl. H. 0.045, d. of each 0.45 m. This vase consists of three small, squat cylindrical bowls with contracted rim, joined together. Because of the join the bowls have only one handle each (partly destroyed). Pale yellow clay with brownish varnish. Plain band on body, another at the transition from body to shoulder, neck and rim painted, handles barred.

3. Splayed bowl. H. 0.07 m, d. 0.155 m. Wide mouth and narrow base, the sides tapering in a hollow curve. Two round loop handles set horizontally below the lip. Pale yellow clay, black varnish. Lower part of body black, middle part encircled by three thin bands, below the rim another broader one. The rim is painted with dashes. Inside, rings of paint at top and bottom, lowest part, however, wholly painted in the same way as on the outside. Handles with dashes.





Fig. 206. L. H. III pottery. Group from Room XXXII.



4. Stemmed goblet. H. 0.14 m, d. 0.13 m. Open bowl with two rounded loop handles vertically from the lip. The high stem is slightly swollen at the middle (cf. Gjerstad, *Studies on prehistoric Cyprus*, p. 228). The foot is domed. Red clay; undecorated.

5. Cup with three handles. H. 0.052 m, d. 0.105 m. Shallow, open shape with small ring foot and three vertical, round loop handles. Rough, light yellow clay. Undecorated.

6. Bowl with two handles. H. 0.065 m, d. 0.10 m. Shallow, conical shape with slightly out-curved rim, ring foot, and two flat loop handles set horizontally below the rim. Red clay.

7. Bowl with two handles. H. 0.045 m, d. 0.09 m. Shape as last, with two flat loop handles, set horizontally but slanting upwards. Reddish clay; undecorated.

8. Amphora. H. 0.20 m, d. 0.18 m. Elongated, globular shape with short neck and flaring rim, two flat handles from rim to shoulder, ring foot. Red, coarse clay; undecorated.

The following more or less fragmentary vases come from various separate places:

1. Stirrup-vase (only body left), Square I 7 (fig. 207: 1). Preserved h. 0.09 m, d. 0.105 m. Globular shape, reddish-grey clay, blackish-brown varnish, partly worn off. Shoulder divided by a band on a level with base of handles into two panels, each filled with double-barred zig-zags and curved lines. On the body lines. The foot is black.

2. Stirrup-vase from House G (fig. 207: 2). H. 0.082 m, d. 0.065 m. Globular body with unusually broad lower end of false neck, near spout an air-hole pierced in the shoulder behind false neck. Coarse, reddish clay, dull, brownish-black varnish. On one side of the body of the vase a ship with lattice-filled sail,<sup>1</sup> with high bows and with the oars indicated by transverse lines across the lower part of the ship; on the other side, more or less square panel filled with crowded lines. On the handle and false neck two curved lines; round bases of handles and the spout plain bands.

3. Squat bowl, with three feet, from House G. Upper part missing (fig. 207: 3). Preserved h. 0.085 m, d. 0.12 m. Cylindrical body with three short, vertical legs. Reddish clay, greyish surface; brownish varnish. On the body the base of a handle. The decoration consists at the top of herring-bone pattern, and then zig-zags between plain bands at top and bottom. On the legs, the pattern consists of groups of curved lines drawn in different directions.

4. Open bowl. Terrace III (fig. 207: 4). H. 0.145, d. 0.325 m. Open type with somewhat curved sides; foot with torus. Greyish surface, reddish-brown varnish. The decoration consists of broad and thin bands on the inside and out. The handles have broad horizontal lines. Foot and rim painted.

5. Open bowl. Square L 13 (fig. 207: 5). H. 0.205 m, d. 0.295 m. High shape with

<sup>1</sup> During the Classical period the mainsail was reinforced with sewn-on strips of leather, which divided it into squares cf. A. Köster, *Das antike Seewesen*, p. 171.



Fig. 207. L. H. III pottery.

curved sides; two upright loop handles with horizontal attachments (one missing); foot with torus. Greyish-red clay with slip. The handle-zone, which is bordered above by 2, and below by 3, lines has on either side two large loops facing each other (probably strongly stylised octopuses). Above the foot a band. Foot and lip painted. Handles have a single stroke of paint; similar strokes also round their bases. Inside, three pairs of circles.

6. Open bowl. Square H 7, close to Wall 94 (fig. 207: 6). H. 0.355 m, d. 0.54 m. Grey clay, blackish-green varnish. High, open shape with curved sides. Two horizontal handles, pierced at the base; foot with torus. On either side of the handle-zone at the centre a »triglyph» section the middle of which is filled with triangles and latticed bands on either side, with dashes on their inner sides and attached to the outer edge solid arcs doubly outlined, the outer line dotted at the edge. From the lower part of this motive to either side issues a broad, curved band with double outlines, the upper one with dots on the outer edge. The arc-lines terminate in two thin curls. The motive probably represents an octopus translated into »Granary style». The lower part of the vase has two pairs of thin bands.

Between the rim and the main motive a band in relief with dashes. Inside groups of concentric circles. The lip is painted. The handles are painted with strokes.

7. Open bowl. Terrace III, Mycenaean stratum (fig. 207: 7). H. 0.08 m, d. 0.10 m. Reddish-yellow clay, red varnish. Body of vase with strongly curved sides, gently passing over into a slightly out-curved rim; 2 horizontal bands; high foot with torus. The whole vase painted inside and out with the exception of the foot.

8. Open bowl. Square G 7. Mycenaean stratum (fig. 208: 1). H. 0.115 m, d. 0.17 m. Curved sides, flaring rim. Two horizontal handles. Reddish-yellow clay, brownish-black varnish. Between broad, filled bands two parallel wavy lines at a height with the handle. Handle with a line and strokes near to base. Inside completely painted, with the exception of a reserved band below the lip.

9. Open bowl. House I, Room XLVI (fig. 208: 2). H. 0.12 m, d. 0.17 m. Yellow clay; shape like preceding. The vase is coated inside and out with black varnish, which has partly flaked off.

10. Open bowl. Square D 3. Mycenaean stratum (fig. 208: 3). H. 0.06 m, with handles 0.095 m, d. 0.09 m. Roughly moulded; not wheel-made; high foot, developing without sharp articulation into slanting sides; the handles are attached near the lip and rise parallel to the wall of the vase. Greyish-yellow, poorly levigated clay, without any varnish.

11. Three-handled cup. Square G 12; stratum of House H (fig. 208: 4). H. 0.055 m, d. 0.97 m. Open shape with three vertical loop handles from the rim to the foot. Reddish clay. Rough surface without varnish.

12. Cup. North part of House B, close to the Roman Baths, Mycenaean stratum mixed with Middle Helladic deposit (fig. 208: 5). H. 0.07 m, d. 0.12 m. Curved sides





Fig. 208. L. H. III pottery.

with flaring rim, handle restored, foot with torus. Greyish-green clay, blackish-brown varnish. In the handle-zone, between two narrow bands, a wavy line. Inside, on the bottom, a spiral, then two groups, of two bands each.

12 b. Fragment of a similar cup. Square I 13. H. 0.08 m, d. 0.135 m. Greyish-yellow clay, blackish-brown varnish. Wavy line on inside of handle, plain band round the middle, inside a large spiral. The lip is edged with paint.

13. Cup. Square D 8, Mycenaean stratum (fig. 208: 6). Shape as last. H. 0.08 m, d. 0.11 m. Reddish-brown clay without slip, brownish-black varnish. Ring foot. Rim and handle have dashes.

14. Cup. Lower Town. Floor of Room XXXII. H. 0.045 m, d. 0.07 m. Shape as last, but lower. Yellow clay, reddish-brown varnish. Wavy line on outside, spiral inside. The rim is edged with paint.

15. Cup. Lower Town, Mycenaean stratum. H. 0.042 m, d. 0.065 m. Reddish clay, shape same as last but taller. Unpainted.

16. Small bowl. Square E 2. H. 0.025 m, d. 0.04 m. Shape like No. 8. Greyish-yellow clay, brownish-black varnish. Painted all over; paint partly worn off.

17. Stemmed goblet (restored). Square G 3. H. 0.175 m, d. 0.145 m. Deep cup with two vertical handles, small, dome-shaped foot. Yellow clay, red varnish. The decoration consists of a wavy line on a height with the lower end of the handles, and two rings of paint at the transition to the foot.

18. Stemmed goblet (restored). Square K 12. H. 0.17 m, d. 0.145 m. Type as last, but better made and with broader foot. Yellow clay, black varnish. On either side between the vertical handles, of which only the base is preserved, two large, all-black tongues. At the transition to the foot 5 narrow rings; foot painted.

19. Stemmed goblet, cup and foot made separately, the cup roughened at the bottom so as to obtain a better join; foot missing. Square K 12. H. of cup 0.08 m, d. 0.145 m. Very narrow, vertical handles, one of which is missing, the sides curve slightly outwards. Greyish-yellow clay, blackish-brown varnish. In the handle-zone 3 wavy lines, then one broad and two narrow bands; the transition to the foot is painted. The handles are barred.

20. Fragment of similar stemmed goblet. Lower Town. H. 0.175 m, d. 0.17 m. Broader, deeper cup, better earlier shape. Undecorated.

21. Ladle. Square G 14; Mycenaean stratum (fig. 209: 1). H. 0.06 m, with handle 0.115 m, d. 0.08 m. Greenish-yellow clay without slip. Rounded bottom, from which the walls rise straightly upwards. High, flat loop handle, from the lip to the bottom. Undecorated.

22. Jug. Lower Town (fig. 209: 2). H. 0.292 m, d. 0.21 m. Globular body with cylindrical neck and mouth curving outwards and upwards; with spout. A flat loop handle from shoulder to top of neck; coarse, greyish-yellow clay, blackish-brown varnish. In the handle-zone a wavy line, above which from the wholly painted neck hangs a drop-ornament. At the transition from the shoulder to the body of the vase a wide band between two narrower ones on either side, below it two narrow bands. Lip edged with paint, dashes on handle.

23. Fragment of a similar jug (lower part and a piece of the mouth missing). Lower Town. Preserved h. 0.17 m, d. 0.135 m. Light-yellow clay, brown varnish. On the shoulder two wavy lines, then a broad band with two narrower ones on either side, lower down on the body of the vase another band. Neck painted, handle barred. Faintly-modelled trefoil mouth.

24. Necked jar. Floor of Room XXXII, House G. H. 0.22 m, d. 0.26 m. Globular





Fig. 209. L. H. III pottery.

body, high neck with out-turned rim, on the broadest part of the body two small loop handles set horizontally; foot missing. Light yellow clay, brownish varnish. In the handle-zone two wavy lines, below them a broad, plain band. On the shoulder three narrow bands; neck painted. Stroke of paint on handles. Lower part of vase deeply incised so as to make a better fastening for the ring foot, which is missing.

25. Plate. Lower Town, House G (fig. 109: 3). H. 0.065 m, with handle 0.095 m, d. 0.31 m. From the flat base two faintly out-curved walls slant upwards. Only one handle is preserved set horizontally on upper rim, but the plate must originally have had three. Greyish-green clay, black varnish, mostly worn off. The decoration both inside and out consists of concentric circles both, broad and narrow; in the centre, inside, a spiral coil. The walls are painted all over inside and out. The handle, which has a rim and central groove, is, like the rim, decorated with dashes.

26. Plate. Near west tower of city wall (fig. 209: 4). H. 0.033 m, preserved d. 0.125 m. Shape like last. Reddish clay, red varnish. Inside decorated with free-hand circles and straight lines. The piece of handle preserved is painted with dashes.





Fig. 210. L. H. III pottery.

27. Patella. Lower Town, Mycenaean stratum. H. 0.015 m, d. 0.055 m. In the centre of the rounded bottom a boss, upper rim terminates abruptly. Red clay. Undecorated.

In the Mycenaean strata were often found sherds of very coarse pottery, large pithoi, which are often embellished with plastic bands, decorated in different ways (fig. 132: 8).

Fragm. 1 has simple, incised zig-zags, fragm. 2 likewise incised latticed triangles, fragm. 3 rows of circles impressed with a round, hollow instrument, fragm. 4 three to four plastic bands, from the lower of which depend plastic curved fillets, loops, and semicircles, and these have been decorated in the same manner as fragm. 3. Fragn. 6 was decorated with the aid of an oblong, rectangular stamp, which was

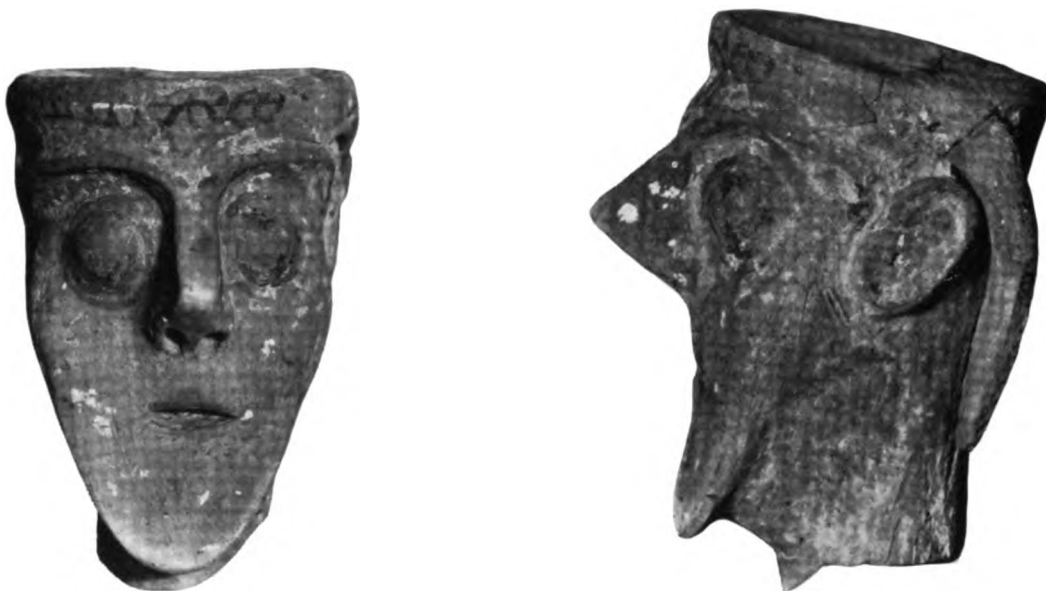


Fig. 211. L. H. III terracotta sculpture.

applied in such a way that the impressions form a zig-zag; within the broad frame of the stamp a herring-bone pattern running the long way of the stamp. Fig. 210.

Coarse fragments of such a pithos were used to cover over Tomb P. G. 22. The clay is as a rule very coarse and in some instances probably had some small pebbles added to it to ensure better firing. In the fractures the grey colour of the slay is still visible though the outside is fired yellow.

In the Lower Town, Square 12, in a Mycenaean stratum was found a clay lamp of an interesting type. It is made of coarse, yellow clay without the aid of a potter's wheel. H. 0.045 m, l. 0.11 m. The oblong container is prolonged at one end to form a bridged spout. Inside are distinct traces of fire (fig. 213: 8).



*Miscellaneous Finds**Clay*

In House G, in the Lower Town, close to the bench in the inner corner of Room XXXII, together with the vases enumerated above, were also found some terracotta statuettes.

1. Head of a large terracotta figure (fig. 211). H. 0.12 m, br. 0.07 m. Yellowish-red clay which has been coated with white paint now mostly worn off. Red, lustrous varnish. The head is flat on top with a torus like a crown round the skull, low forehead, powerfully projecting nose, large bulbous eyes, small mouth with thin lips, plastically indicated beard, ears strongly modelled, sloping backwards. The hair is represented



Fig. 212. L. H. III terracotta figurines.

by thick strands of clay some of which have come loose. Only part of the original painting preserved over the forehead, on the eyes, and lips. The elongated oval face, with its bulbous eyes, and the strong nose, impart a certain character to the face — he appears noble, »The Lord of Asine«.

Clay figures of this size are rare during the Mycenaean period. It might have been debated whether we had here a female head,<sup>1</sup> but for the plastic modelling of the chin there can be no doubt. Similar female heads, even if not quite so large, have been found at other places, inter alia one at Tiryns, not yet published.

2. Terracotta figure. H. 0.155 m, br. 0.055 m (fig. 212). For type, cf. Val. Müller, *Frühgriechische Plastik*, No. 257, but less indications of arms. Plastic breasts, swelling on the neck. Reddish-brown varnish. The decoration, which indicates the dress, like that in the aforesaid type.

3. Terracotta figure (fig. 212). H. 0.15 m, br. 0.05 m. Type like the preceding, but without swelling on the neck. The dress is here indicated by horizontal and

<sup>1</sup> Cf. Evans, *Palace of Minos* IV, p. 757.



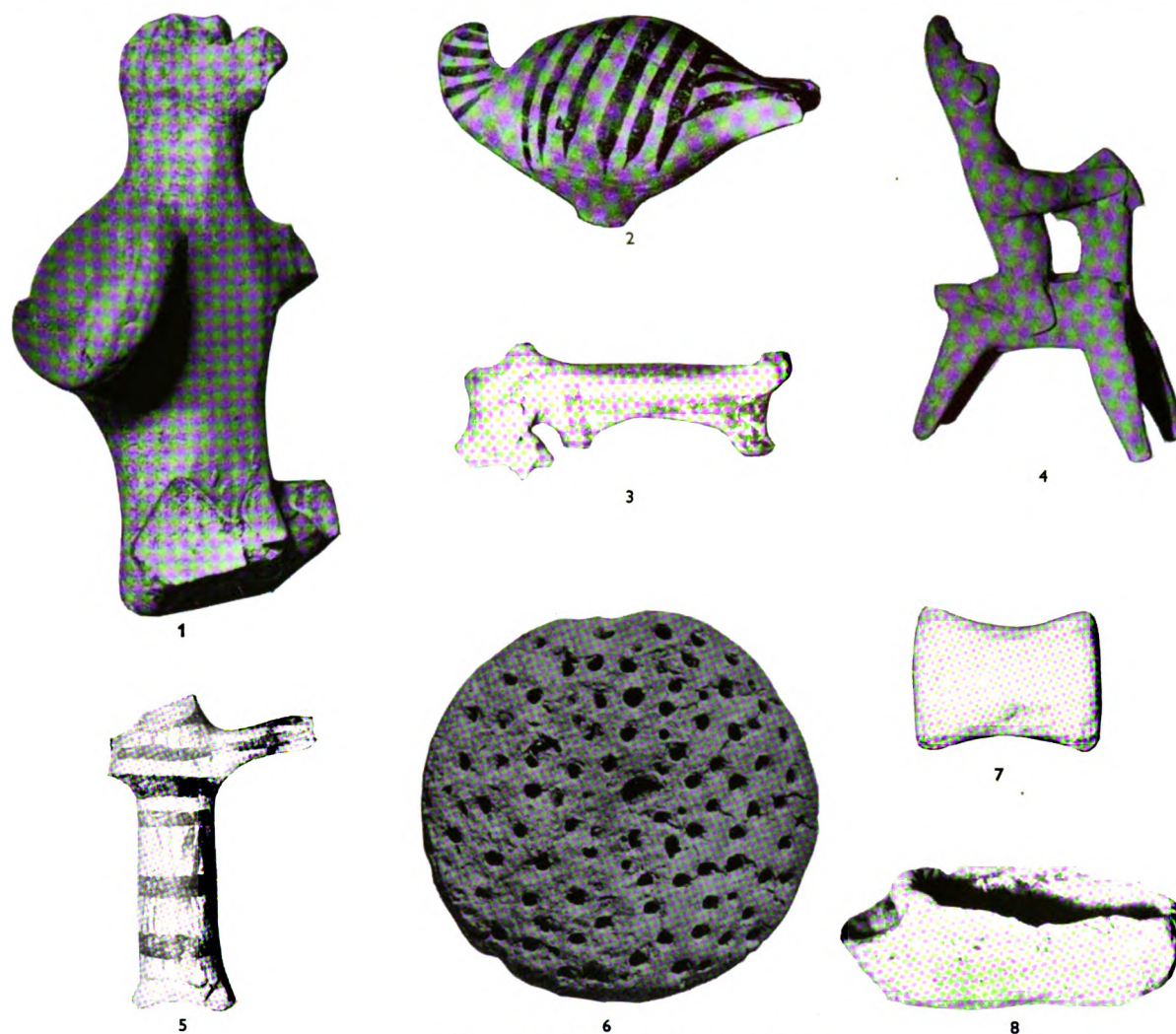


Fig. 213. L. H. III terracotta objects.

vertical lines. The breasts are painted, the indications of the arms are decorated with transverse bands.

4. Terracotta figure (fig. 212). H. 0.11 m, br. 0.08 m. Black varnish. Plastic nose, eyes, and breasts. Longer arms and shorter lower part of body than the preceding one. The dress is here indicated by curved lines from the neck to the waist, indicated by a girdle; transverse lines on arms.

5. Fragment of a terracotta figure (fig. 212). Preserved h. 0.115 m, br. 0.06 m. Greyish-yellow clay, red and black varnish. Sharp elongated nose, plastic eyes below painted eyebrows, around the neck two necklaces, the lower with pendant hanging down between the plastically indicated breasts (greater part now fallen off). Below, the dress is indicated by fine curved lines in both directions. At the back, the hair is indicated by 6 painted locks. Head-covering irregularly latticed on upper side.

6. Fragment of clay figure (fig. 212). H. 0.12 m, br. 0.058 m. Coarse, red clay without any paint. Rectangular type, without pronouncedly marked arms. Plastic eyes and breasts, elongated nose. Pouch-like swelling on the neck.

The 6 figures here described obviously all belong to the very last era of the Mycenaean period, to which the shrine can also be dated through the pottery. Of particular interest are the ornaments indicated in No. 5 through painting, and these have their counterpart in some finds from Late Mycenaean tombs.

In Mycenaean strata, throughout the whole excavation area have also been found more or less fragmentary idols of the known types, with the upper part of the body both round and crescent-shaped; cf. Persson, *The Royal Tombs*, p. 83 ff. Both types occur alternately with plastic and painted tresses. Of greater interest is a small figure of a monkey, pug-nosed and with a hump on his back, which he points to by placing his turned-back right hand on it (fig. 213: 1). There are also numerous fragments of animal figures, oxen, dogs, and birds (fig. 213: 2); particularly noteworthy is one animal of indefinable species or kind, which carries one of its young in its mouth (fig. 213: 3). At the transition to the Geometric period appear some equestrian figures, which differ clearly in type from the later, Geometric ones. They are modelled with high-crowned head-gear, probably helmets, and have, like the Mycenaean figures, large, plastically modelled eyes, placed on either side of the beak-like nose (fig. 213: 4). Amongst the female idols we notice also one of a more particular type, with a cylindrical body, from which long arms issue horizontally (head missing). The dress is indicated by broad, horizontal bands and thinner, vertical lines (fig. 213: 5).

A peculiar object reminding one forcibly of a round loaf of bread which has been thoroughly pierced for fermenting may also be mentioned (fig. 213: 6). As far as I know, this has no counterpart anywhere else. It was found in a Mycenaean stratum and is made of reddish clay, h. 0.03 m, br. 0.10 m. I am ignorant of its purpose, unless it may be imagined as being a votive loaf of bread.

In House I, Room XLVI was found an accumulation of thread reels of different sizes, made of poorly fired clay (fig. 213: 7). In workmanship they are coarser than Mycenaean reels of stone, and both types differ distinctly from the E. H. reels, which are much taller and narrower.

#### **Stones and Glass.**

Some few ornaments of semi-precious stones have been found in the settlements. A pendant bead of carnelian, h. 0.017 m, is made roughly in the shape of a bored axe (fig. 214: 1). As a rule, carnelian beads are of a flat type.

Inside Wall 46 b was found, embedded in the mortar, a large number of glass beads with a blueish-white, iridescent surface, which still lay more or less in order after the string had decomposed (fig. 215). The beads, which measure 0.01 to 0.005 m along the string-hole, 0.012 m to 0.01 m, in diameter, have their counterpart in the

Mycenaean tombs. The necklace was probably deposited in the wall as a votive offering at the building.<sup>1</sup> They have a counterpart in a Hellenistic house of the Lower Town, cf. below.

#### Metal.

1. Celt. House I, Room XLV. Below the level of the walls were found a bronze celt as well as a bronze pin, still in a Mycenaean stratum (fig. 214: 2). Length of the celt 0.15 m, greatest width 0.04 m. Length of pin 0.062 m.

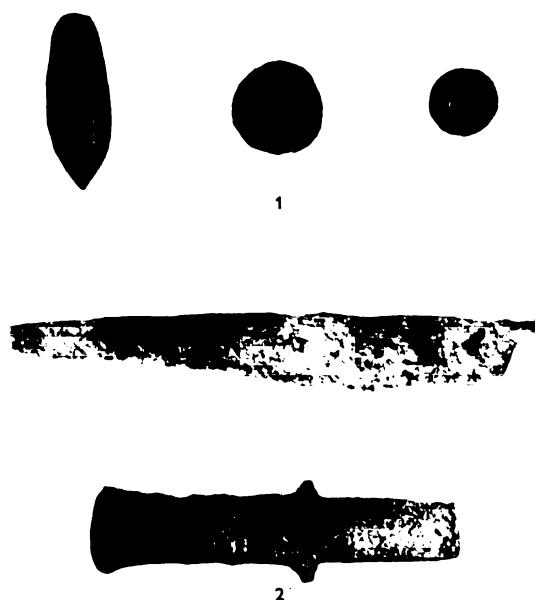


Fig. 214. L. H. III semi-precious stones (1) and bronze objects (2).

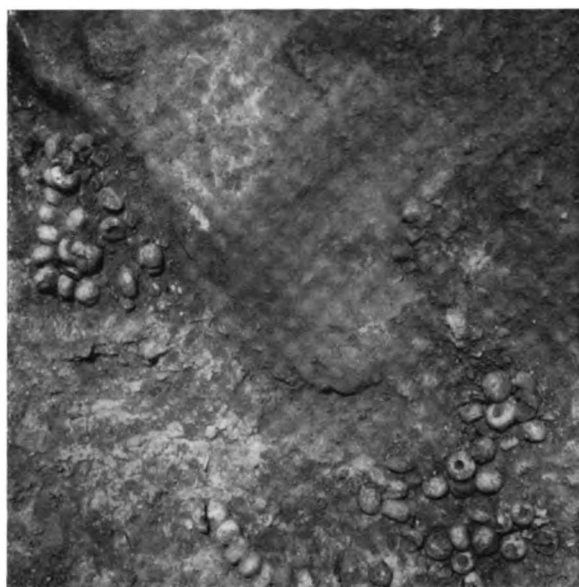


Fig. 215. L. H. III necklace *in situ*.

2. Single-edged knife. Square H 8, Mycenaean stratum. L. 0.10 m, br. 0.015 m. Broken off towards the point. Two rivets for attaching blade to handle still preserved.

#### Bone.

1. Fragments of an undecorated comb.
2. Fragments of several pins of the same type as those found in the chamber-tombs.
3. Some worked boars' tusks with holes on back for fastening. Helmet ornaments.
4. Beads in the form of gourd pips, with or without incised lines along string-hole and along edges.

<sup>1</sup> Cf. Harald Sjövall, Om byggnadsoffer och besläktade bruk hos greker och romare, in *Från Filologiska Föreningen i Lund. Språkliga uppsatser IV*, p. 158 ff.



## GEOMETRIC

Geometric colonisation has been traced at Asine up on the acropolis, and also in the Lower Town, chiefly in its northern part. The remains of house foundations preserved give evidence of poor construction, but in their vicinity are everywhere found considerable traces of occupation. We have in our possession some closed finds, but as they obviously belong to the last phase of the period, their treatment may be left until later.

## POTTERY

The pottery which, in dealing with the Proto-Geometric tombs, is termed Dorian pottery, has left a few traces behind even in the settlement.

1. High amphora with foot. Square G 12 (fig. 216: 1). H. 0.52 m, d. 0.40 m. Yellowish-green clay; hand-made. Ovoid body tapering downwards, gently passing over into a low, broad neck with out-turned rim. High foot, two horizontal handles set high on the shoulder. The decoration consists of a wavy line below the neck, above the handles, as well as a similar one round the edge of the mouth.

2. Amphora (neck missing). Square H 11 (fig. 216: 2). Preserved h. 0.36 m, d. 0.40 m. Yellowish-green clay; hand-made. Rounded body with two horizontal handles at the middle and remains of a vertical handle on the shoulder. Roughly flattened base. Undecorated.

Both here and in the Proto-Geometric tombs the ware and technique differ very much from those of ordinary Proto-Geometric. Specimens of this typical Proto-Geometric pottery are not very rare.

1. Open bowl. Square M 10 (fig. 216: 3). H. 0.085 m, d. 0.085 m. Globular body with rim splayed slightly outwards, two slanting loop handles (one missing) set horizontally on the middle of the side, and high, hollow, conical foot. Greyish-green clay; dull, black varnish. The whole body, inside and out, is coated, with the exception of a band on a level with the handles, within which two zig-zag lines have been carelessly painted.

2. Open bowl. Square H 11. H. 0.092 m, d. 0.092 m. Yellow clay, brownish-black varnish. Shape and decoration as preceding one, but more meticulously done. The lip and edge of the foot are painted.

3. Square H 11 (fig. 216: 4). H. 0.075 m, d. 0.075 m. Yellow clay, black varnish. Shape of body like last, but only one vertical handle from the lip to the middle of the body. The foot slightly lower. Completely covered with black varnish.

4. Cup. Square M 10 (fig. 216: 5). H. 0.075 m, d. 0.075 m. Reddish clay, brownish-black varnish. Completely covered except the edges of the foot, lip, and handle, which have horizontal bars. On the rim are two thin reserved bands. Shape as last but slightly lower and more abrupt transition to a low rim. High, elegant foot.



Fig. 216. Geometric pottery.

Later this type of cup loses the hollow, conical foot and we find a type which had obviously been preserved in much the same form throughout the Geometric period.

1. Cup. Square F 11; Geometric stratum. H. 0.07 m, d. 0.12 m. Flattened, conical body with low, straight rim and flat, wide handle from the rim to the middle of the body. Flattened base. Yellowish clay, reddish varnish. The handle panel is divided into metopes by coarse, vertical bands with narrow, similar ones in the spaces between. The body of the vase is otherwise completely coated. Below the rim a black band; the rim unpainted. The handle with crossed diagonal stripes typical of Geometric pottery and ribbed below.

2. Cup. From the same place as the preceding one (fig. 217: 1). H. 0.065 m, d. 0.125 m. Yellow clay, reddish-brown varnish. Shape as last. Decoration as last, but better preserved.

3. Cup. From the same place as the last. H. 0.07 m, d. 0.11 m. Yellow clay, red varnish. Shape and decoration as last.

4. Cup. From the same place as the preceding one. H. 0.07 m, d. 0.12 m. Yellow clay, black varnish. Shape and decoration as last.
5. Cup (handle missing). From the same place. H. 0.065 m, d. 0.11 m. Grey clay, black varnish. Shape and decoration as last.
6. Cup. From the same place (fig. 217: 2). H. 0.07 m, d. 0.115 m. Yellowish clay. Brownish-black varnish. Shape and decoration as last, but ribbed handle.
7. Cup. From the same place. H. 0.072 m, d. 0.125 m. Yellow clay. Reddish-brown varnish. Shape and decoration as last.
8. Cup. From the same place. H. 0.07 m, d. 0.11 m. Yellow clay; blackish-red varnish. Pattern on shoulder missing, but otherwise shape and decoration as last.
9. Cup. Square F 9; Geometric stratum. H. 0.07 m, d. 0.12 m. Yellow clay; blackish-brown varnish. Shape and decoration like No. 7.
10. Cup. Same place as last. H. 0.075 m, d. 0.12 m. Yellow clay; black varnish. Shape and decoration as last, but handle crossed and ribbed.
11. Cup. From the same place. H. 0.075 m, d. 0.125 m. Yellow clay; black varnish, mostly worn off. Shape and decoration as last.
12. Cup. From the same place. H. 0.07 m, d. 0.11 m. Clay, varnish, shape and decoration as last.
13. Cup. From the same place. H. 0.062 m, d. 0.11 m. Clay, varnish, shape and decoration as last.
14. Cup. Square H 8. H. 0.065 m, d. 0.12 m. Greyish-yellow clay; black varnish. Shape and decoration as last.
15. Cup. Square G 7 (fig. 217: 3). H. 0.065 m, d. 0.095 m. Body more globular, foot with torus. Wholly painted, except two reserved lines on the outside of the rim, one on the inside. Handle barred.
16. Cup. Lower Town (fig. 217: 4). H. 0.055 m, d. 0.09 m. Yellow clay; black varnish. Shape as last but without torus. Completely coated.
- 16 b. Cup. Lower Town. H. 0.07 m, d. 0.095 m. Greyish-yellow clay; black varnish. Shape and decoration as last.
17. Cup. Square M 10 (fig. 217: 5). H. 0.045 m, d. 0.07 m. Yellow clay; brownish-black varnish. Shape as last. On the outside narrow bands, between the two uppermost a row of dashes. Inside painted brown, except for a reserved line below the lip. Handle with loop.
18. Cup. Square E 8 (fig. 217: 6) together with 3 others in a deposit. H. 0.085 m, d. 0.105 m. Yellowish clay; brownish-black varnish. Carinated shape, the upper part of the body gently passing over into a straight vertical rim. Flat loop handle from the rim to the middle of the body of the vase. Flattened base. The entire vase is painted, with the exception of the rim, which has two narrow bands of varnish on the natural colour of the clay. The edge is painted on the inside. The handle has at the top three horizontal strokes, below these three vertical ones.





Fig. 217. Geometric pottery.

19. Cup. From the same place as No. 18. H. 0.09 m, d. 0.11 m. Yellowish clay. Red and brown varnish. Shape and decoration as last, but on the handle only two vertical strokes.

20. Cup. Like the preceding one. H. 0.08 m, d. 0.105 m. Yellow clay, red varnish. Shape and decoration as last, but at the top and bottom of the handle there are horizontal strokes, between them 3 vertical ones.

21. Cup. From the same place. H. 0.085 m, d. 0.107 m. Yellow clay; red and black varnish. Wholly painted except the lip and handle. Like the last.

22. Cup. Square H 11. H. 0.075 m, d. 0.105 m. Yellow clay; thin, brown varnish. Shape as last. Decoration as No. 20.

23. Cup. Lower Town (fig. 217: 7). H. 0.07 m, d. 0.095 m. Greyish-yellow clay; black varnish. Shape as last (upper part of handle missing). Altogether covered with varnish.

24. Cup. Square G 7 (fig. 217: 8). H. 0.045 m, d. 0.097 m. Splaying sides. Handle (restored) from rim to side. Red-yellow clay. Encircling lines on base and rim inside zig-zag lines on sides.

From the circumstances of the finds it appears that the types of cups dealt with here are contemporary — they occur side by side in the same deposit.

As to the bowls, these show a great variety of shapes during the Geometric period, as may be seen from the subjoined synopsis.

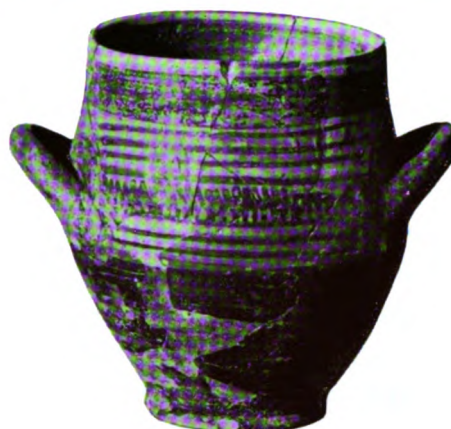
1. Bowl or cup. Square F 15. H. 0.09 m, d. 0.15 m. Greyish-yellow clay; black varnish, mostly worn off. From a low ring foot the walls of the vase slope steeply up to the wide mouth. Horizontally attached handles parallel to the lower slope of the side. Completely painted.

2. Bowl. Square F 12 (fig. 218: 2). H. 0.13 m, d. 0.12 m. Brownish-red clay; blackish-brown varnish. Tall, carinated shape with a straight lip. Two horizontal loop handles on the middle of the body. Foot with torus. Wholly coated except for a broad handle-zone with four narrow, horizontal bands at the top, three at the bottom, between these two groups of slovenly zig-zags. The lip is unpainted inside and out.

3. Bowl. Square G 11 (fig. 218: 3). H. 0.195 m, d. 0.225 m. Greenish-yellow clay; black varnish, mostly worn off. Conical body passing over into a comparatively low, concave rim. Two high, flat loop handles from the rim to the transition between shoulder and body of vase. Comparatively high ring foot. The decoration, starting from the top, consists of the following elements: on the rim a row of Argive birds; the broad zone on the shoulder and upper part of the body of the vase are divided into panels; nearest the handle are horizontal ribbed bands, after that Argive birds arranged in two rows one above another on the sides and between adjacent ones with three lines between the rows and separating the birds from the ribbed lines, then again ribbed bands with horizontal lines and Argive birds with bands below. Below this on the lower part of the body a broad band, a zig-zag, three narrow bands, a wavy line, five



1



2



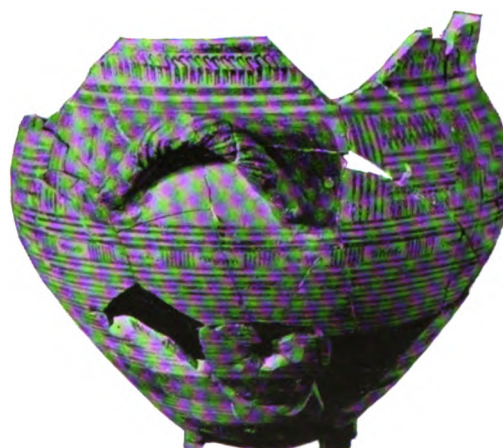
3



4



5



6

Fig. 218. Geometric pottery.



narrow bands, and a wholly painted foot. The handles have at the top a cross, then two groups of horizontal lines with a group of dashes between. The inside is altogether black, with the exception of the rim, which is decorated with groups of vertical lines intersecting two reserved bands.

4. Open bowl. Square H 12. Geometric vase stratum (fig. 218: 1) H. 0.255 m, d. 0.295 m. Yellowish clay; blackish-brown varnish. Shape as last, but horizontal handles and a low foot. The decoration consists first of a broad band; below the rim, the shoulder-zone is divided into panels and has close to the handles, groups of nine horizontal lines, the central one consisting of dots, the field between them being occupied by three equilateral triangles, cross-hatched, the middle one with triple outlines, and two swastikas placed in the upper part of the field. Below, three plain bands, a row of dots, four plain bands across the wholly painted lower part of the body. The handles are edged with paint, in the centre a stroke, inside wholly black.

5. Open bowl. Square F 11 (fig. 218: 4). (Cf. cups.) H. 0.268 m, d. 0.305 m. Yellowish-red clay; blackish-brown varnish. Shape as last but higher rim, plaited, horizontal handles with knobs near shoulders, high ring foot. Decoration: on the rim, between double bands, Argive birds, in the handle-zone which is divided into panels, close to the handles, four vertical lines, then groups of horizontal zig-zags, five vertical lines, and then groups of horizontal zig-zags, five vertical lines, four rows of dots, five vertical lines and in centre field step-meander. Below, between thin bands, a band filled with upright hooks. The lower part of the vase is black, the foot is encircled. The handles are wholly painted with thick strokes at the bases. The inside is painted, with the exception of the rim, which has three light reserved bands.

6. Bowl. Square F 11 (fig. 218: 5). H. 0.295 m, d. 0.315 m. Yellowish clay; blackish-brown varnish. Shape as last. Decoration: on the rim, between two thin bands hatched meander-hooks, in shoulder-zone divided into panels with, starting from the handles, four vertical lines, one elongated latticed triangle, four vertical lines, then metope with horse and as a filling ornament above the horse's back a latticed triangle with two fishes at the sides. Below the belly of the horse an elongated, narrow oval figure with dotted outer line, in front of the horse a group of chevrons, then four vertical lines, in the central metope a hatched step-meander. The lower part of the vase is surrounded by thin bands, one of them dotted. Foot and handles painted, inside painted, with the exception of a reserved band round the rim.

7. Bowl. Square F 11 (fig. 218: 6). H. 0.29 m, d. 0.345 m. Greyish-yellow clay; brownish-black varnish, partly worn off. Shape as last, but more open, twisted handles. Decoration: on the rim are Argive birds between two enclosing bands. Within the handle-zone panels, nearest the handle five vertical lines, then net-pattern above a group of Argive birds with five horizontal lines between, then a group of vertical lines, in the central metope a hatched step-meander. The lower part of the vase is painted with thin bands, except for a broad belt divided into panels, vertical lines

alternating with zig-zags. Foot and handles painted. The inside is black with the exception of two reserved bands round the rim.

8. Bowl. Square H 11 (fig. 219: 1). H. 0.185 m, d. 0.25 m. Yellowish clay; blackish-brown varnish. Shape as last, but lower rim and flatter horizontal handles. Decoration: on the rim bands, in the handle-zone three vertical lines, a water-bird with cross-hatched body and three lines pointing obliquely upwards indicating wings, together with a few small filling ornaments. After that three vertical lines, cross-hatched loop with double outlines, three vertical lines and central metope with a flower with four hatched petals and latticed triangles filling the space between the petals from the centre of the sides of the metope. The lower part of the vase is encircled by broad and thin bands. The handles are decorated alternately with crosses and groups of lines. Inside completely painted.

9. Bowl. Square F 13; Geometric stratum (fig. 219: 2). H. 0.12 m, d. 0.177 m. Greyish-yellow clay; brownish-black varnish. Shape as last but more open. Vertical rim. Decoration: bands round the rim, the handle-zone divided into metopes and triglyphs, nearest the handles four vertical lines, then a water-bird as in the last, four vertical lines. Cross-hatched loop with double outlines, four vertical lines, etc. Lower part black, the handles painted. Inside painted with the exception of a reserved band round the lip.

10. Open bowl. Square F 13; Geometric stratum. H. 0.105 m, d. 0.16 m. Light yellow clay; red and black varnish. Shape as last. Decoration like last, but only triglyph and metope decoration without any birds.

11. Open bowl. Square F 13; Geometric stratum (fig. 219: 3). H. 0.065 m, d. 0.136 m. Yellowish-green clay; reddish-black varnish. Flattened, globular shape with low rim intended to have a lid (missing). Horizontal round loop handles, low foot. Decoration: round the rim two bands, the narrow handle-zone divided into triglyphs and metopes with, close to the handles, five vertical lines, then two horizontal wavy lines partly worn off, vertical lines, etc. Below, closely placed bands. The handles are decorated with rows of dots between plain lines. Inside painted.

12. Open bowl. Squares F—G 7 (fig. 219: 4). H. 0.098 m, d. 0.16 m. Greyish-yellow clay, black varnish. Hemispherical body with rim for lid (missing). Two horizontal round loop handles; comparatively high ring foot. On the upper part of the body a reserved field for decoration. The vase otherwise completely painted. The decoration is divided into two bands; in the upper: latticed lozenge with double outlines, two vertical lines, latticed triangle with double outlines from the top of which issues a vertical line which divides at the top into two angular spirals. At the sides filling ornaments, then two vertical lines, a vertical zig-zag, two vertical lines, latticed meander-hooks, two vertical lines, latticed lozenge, and so on. In the lower row, alternating vertical hour-glasses and vertical groups of lines.

13. Two-handled cup. Square F 13 (fig. 219: 5). H. 0.09 m, d. 0.113 m. Yellowish-

green clay; blackish-brown varnish. Conical body with plain rim. Two vertical handles from the upper edge of rim to the middle of the vase. Low ring foot. Decoration: round the upper half of the vase, starting from the handles, groups of vertical lines, then Argive birds, with triangles beneath the tails, as well as smaller filling ornaments, in the central field a group of horizontal zig-zags. Below, thin bands, the lower part of the vase and the foot painted. The handles are ribbed horizontally. Inside painted with the exception of three reserved bands round the rim.

14. Open bowl. Square D 10 (fig. 219: 6). H. 0.135 m, d. 0.205 m. Yellowish-green clay; blackish-brown varnish. Hemispherical body without marked rim, two round, horizontal loop handles, ring foot. Decoration: in the handle-zone triglyph and metope division by horizontal lines, in the metopes, starting from the handles, groups of horizontal zig-zags, in the central metope a meander. Below, the vase is encircled by narrow bands, the lowest part and the foot wholly black. The handles are edged with dashes in between.

15. Open bowl. Lower Town. H. 0.095 m, d. 0.112 m. Greenish-grey clay; black varnish, mostly worn off. Shape as No. 13, with vertical handles. Decoration: at the top a band of chevrons, then six narrow bands in the handle-zone, the lower part wholly black. The vase has been repaired in ancient times as indicated by rivet holes on some sherds.

16. Open bowl. Square F 7 (fig. 219: 7). H. 0.075 m, d. 0.13 m. Yellowish-green clay; brown varnish. Shape as No. 14, but lower. Decoration: entirely black except for a reserved field between the handles decorated with vertical and horizontal lines, as well as a belt of vertical chevrons.

17. Open bowl. Square H 11. H. 0.12 m, d. 0.19 m. Light yellow clay; black, lustrous varnish. Shape as last, but with a clear rim and ring foot. Decoration: round the rim two bands, then vertical, wavy lines, below, three bands, otherwise quite black.

The last six vases, which are distinguished by their unusually finely levigated clay, grey or greyish-yellow in colour, and by their slender shape, plainly differ from the bulk of Geometric vases at Asine. We are undoubtedly entitled to consider them as imported ware, and both clay and decoration point to Sikyon as their place of origin.

Pyxis. Square H 11 (figs. 219: 8; 220: 1). H. 0.205 m, d. 0.40 m. Yellowish-grey clay; blackish-brown, lustrous varnish. Cylindrical shape with slightly curved sides and at the top a rim for supporting a lid. Two broad, horizontally placed handles. The whole vase is covered by a very varied pattern. Bands round the rim. In the handle-zone, nearest the handles, three vertical lines, then horizontal zig-zags, two vertical lines, a panel with a horse surrounded by various filling ornaments, inter alia above the back of the horse a row of Argive birds, below the belly of the horse a shaded square on a handle and a latticed triangle, in front of the horse, below its head, a pair of vertical lines and a vertical row of latticed lozenges. After that three vertical lines and horizontal zig-zags, three vertical lines and a long belt of step-meander, and so on.





Fig. 219. Geometric pottery.

Below, three bands, then a zone with goose-eye pattern. Thereafter three bands, below in a broad zone three parallel cross-hatched zig-zags, below three lines, then a row of Argive birds, and, finally, three more bands. The handles are composed of four strips of clay, separately barred.

The lid, which has a height of 0.025 m and an outside diameter of 0.41 m, is decorated round the edge with Argive birds, on the top, at the extreme edge, with three concentric circles, then goose-eye pattern, after that three concentric circles, Argive birds, three circles, goose-eye pattern, three circles, Argive birds, three circles. The centre is black with four oval reserved spaces and a rosette in the middle. In each of the reserved ovals are four water-birds represented in motion.

Another lid for a similar pyxis was found in the Geometric House on the acropolis (fig. 220: 2). H. 0.035 m, d. 0.395 m. Reddish-yellow clay; reddish-black varnish. Decoration: round the edge zig-zag between lines, on the upper side of the lid, outside, three concentric circles, band with Argive birds, three concentric circles, goose-eye pattern, three concentric circles. The centre with three concentric reserved bands around painted middle and radiating filled narrow triangles.

The centre of both these lids might be said to employ the red-figure technique, where the reserved parts serve as decoration.

As a specimen of the ordinary type of pyxis lid may be cited one from Square L 3 (fig. 220: 3). H. 0.028 m, d. 0.084 m. Greenish-yellow, Sikyonian clay; black varnish. Flat lid with conical knob, decorated with concentric circles. The knob is black.

Before we pass on to the varied collection of other Geometric jugs there may be mentioned a damaged jug of the so-called Salamis type. Square K 4 (fig. 220: 4). Preserved height 0.065 m, d. 0.065 m. Greenish-yellow clay; black varnish, mostly worn off. Rounded body with high ring foot, one handle, of which only the base on the middle of the body is preserved. In the shoulder-zone, thrice repeated, latticed triangle between two narrow bands. Lower part and foot entirely black.

1. Jug. Square F 11 (fig. 221: 1). H. 0.115 m, d. 0.095 m. Greenish-yellow clay; black varnish, worn off. Elongated, globular body which gently passes over into a low neck. Broad loop handle from the rim to the middle of the body, flattened base. Completely covered with varnish.

2. Jug. Square F 12 (fig. 221: 2). H. 0.117 m, d. 0.08 m. Yellowish clay; blackish-brown varnish. Shape as last but higher neck. The handle has been restored. Completely painted.

3. Jar. Lower Town (fig. 221: 3). Preserved height 0.105 m, d. 0.09 m. Grey clay; black varnish. Globular body which gently passes over into a high neck. From the rim to the shoulder two vertical loop handles (missing). The foot, which was probably high as on Proto-Geometric vases, is missing. Decoration: on a level with the bases of the handles a broad reserved band, painted with a row of dots and a line. Otherwise quite black. Lip dashed, handles with three vertical, parallel strokes.



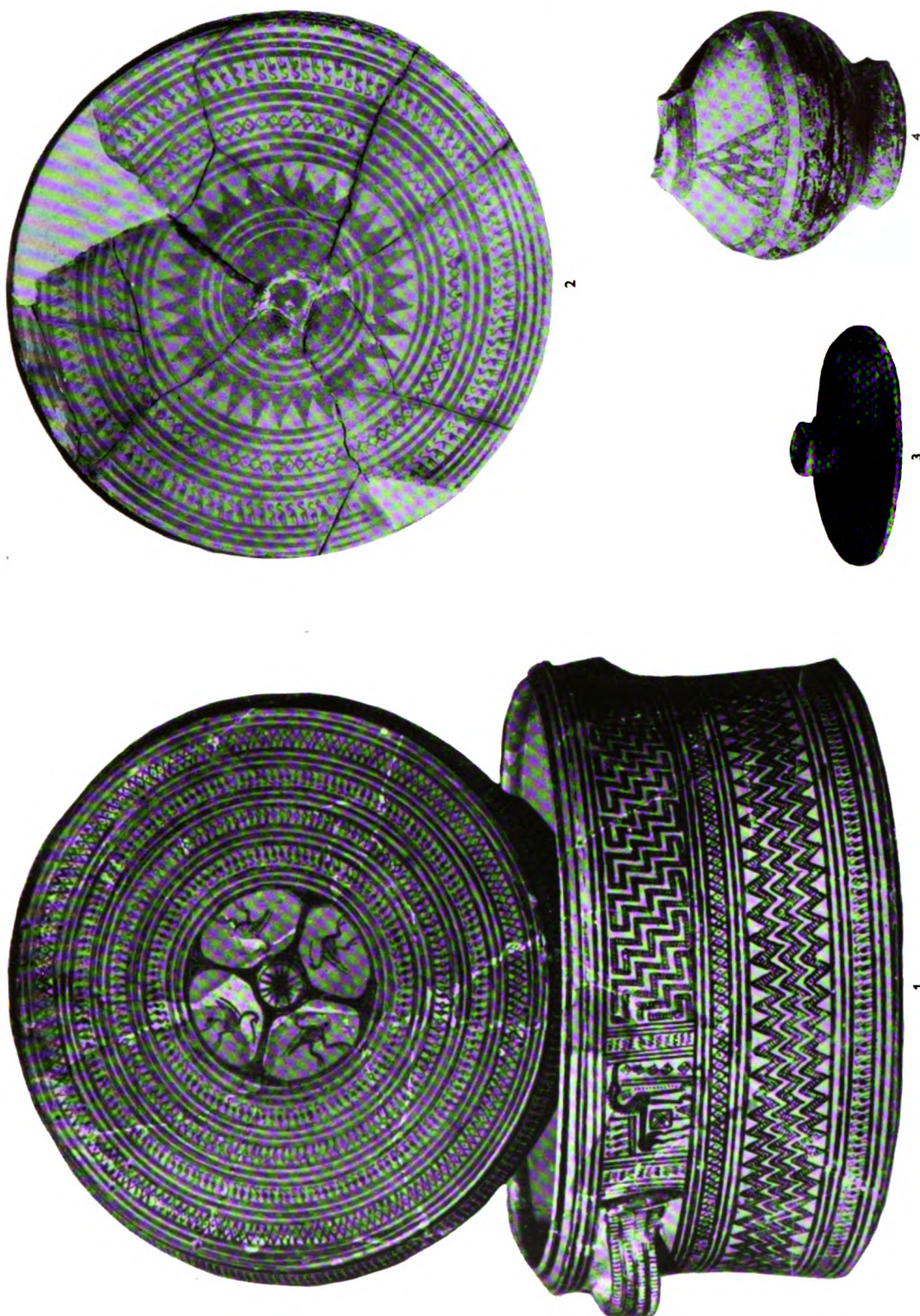


Fig. 220. Geometric pottery.



4. Jug. Square H 7 (fig. 221: 4). H. 0.14 m, d. 0.10 m. Yellow clay; reddish-black varnish. Globular body gently passing over into a high neck, terminating in a slightly trefoil mouth. One broad, flat loop handle from the mouth to the middle of the body. Low ring foot. Broad and narrow bands so close together as to give an impression of red-figure technique. Crossed lines on the handle.

5. Jug. (The greater part of the neck is missing.) Square K 12 (fig. 221: 5). H. 0.105 m, d. 0.085 m. Greyish-yellow clay; black varnish. Globular body with sharply articulated neck, flat loop handle from the rim to the lower part of the shoulder. Broad, flattened base. Decoration: on the shoulder metope and triglyph division, close to the handle groups of vertical lines, then vertical, wavy lines, below thin lines, the lower part of the vase is black. The handle is barred.

6. Jug. Square F 12 (fig. 221: 6). H. 0.27 m, d. 0.185 m. Greenish-yellow clay; blackish-brown varnish, partly worn off. Rounded body with clearly articulated, low neck, terminating in a trefoil mouth, one flat handle from the rim to the shoulder. Low ring foot. Decoration: on the shoulder triglyph and metope division through groups of vertical strokes alternating with horizontal, wavy lines. The middle of the vase completely covered by thin bands, the lower part and base unpainted. The jug had been broken, for there are some rivet holes through the bottom.

7. Jug. Square F 12 (fig. 221: 7). H. 0.48 m, d. 0.28 m. Reddish-yellow clay; blackish-brown varnish. Elongated, globular body with a high neck and trefoil mouth, flat handles from the rim to the shoulder. Ring foot. Decoration: the body of the vase is covered on both sides by vertical groups of concentric circles, between them, below the spout, horizontal strokes. Round the lower part of the neck a reserved field with three horizontal bands at the top, then, close to the handle, a group of vertical lines, after that hatched meander-hooks, below, three horizontal lines, below them a band with vertical wavy lines, finally, three horizontal lines. The upper part of the neck and foot painted. Handle with wavy line and vertical parallel strokes.

8. Jug. Square K 12 (fig. 221: 8). H. 0.455 m, d. 0.24 m. Reddish-yellow clay; reddish-black varnish. Shape as last, but taller. Decoration of body like the last, but between the two groups of circles below the spout some chevrons. On the lower part of the neck, in a reserved field, a horse, below the belly of the horse a hatched loop with double outlines, above the back of the horse swastikas and a hatched triangle, in front of it a double row of chevrons and some wavy lines, behind the horse vertical, wavy lines. The upper part of the neck and foot painted. On the handle, a wavy line between vertical strokes.

9. Jug (neck and handle missing). Lower Town, Geometric stratum (fig. 222: 9). Preserved h. 0.13 m, d. 0.145 m. Globular body with low ring foot. Decoration: on body like last, but between the two groups of circles, below the spout, horizontal, wavy lines, on which stands a water-bird on the shoulder. A hatched triangle is



Fig. 221. Geometric pottery.

inserted on each side as filling ornaments. Below the handle, on the opposite side, an altogether black vertical belt.

10. Amphora. Square H 10. Geometric stratum (fig. 222: 1). H. 0.69 m, d. 0.45 m. Greyish-yellow clay; black varnish which is worn off. Elongated, ovoid shape with a cylindrical neck ending in a double rim. Two round loop handles from the middle of the neck to the shoulder. Ring foot. The body of the vase, the foot, and the handles are painted. The upper part of the rim decorated with a row of reserved dots, the lower one with two reserved bands.

11. Amphora. As last. Fragmentary (fig. 222: 2). Preserved height 0.60 m, d. 0.48 m. Shape like last but higher neck and simple rim, and flat handles. The body of the vase is entirely painted, the neck is decorated with vertical strokes, concentric circles, and narrow triangles in the middle interlaced with each other. The rim is edged with dashes, the handles have strokes.

12. Amphora. (Lower part missing.) Same position as last (fig. 222: 3). Preserved height 0.71 m, d. 0.54 m. Shape like last. The body is painted. On the neck, between two thin bands two groups of concentric circles with solid centres, between them a cross-hatched triangle with double outlines, above the latter a hatched lozenge. Below the circles as filling ornament, wavy lines and smaller triangles, close to the base of the handle two vertical lines. The rim is painted with dashes, the handles with strokes.

13. Neck of amphora. Same position (fig. 222: 7). H. 0.20 m, on the neck two wheels with four spokes, between them a cross-hatched triangle with double outlines. Below three narrow bands, above a broad one. The lip and handles are painted.

14. Amphora. Square H 10 (fig. 222: 4). H. 0.44 m, d. 0.19 m. Reddish-yellow clay; brownish-black varnish. Tall, narrow type, high neck with collar or rim, flat loop handles from the middle of the neck to the shoulder. High ring foot. Decoration: on the shoulder, nearest the handles, groups of vertical lines, then divided into two zones by three horizontal bands, at the top a zig-zag, at the bottom vertical, wavy lines, then three bands, goose-eye pattern, and narrow and broad bands down to the foot, which is painted. The upper part of the neck is painted, then three bands and a broad belt decorated, starting from the handle, with a ladder-pattern with two vertical lines on each side, then cross-hatched meander-hooks, and so on, below two bands. The lip has groups of dashes and a circle reserved in the paint applied on the inside. The handles are decorated with crosses between horizontal lines, the rims are edged with paint.

15. Jug. Square H 10 (fig. 222: 5). H. 0.41 m, d. 0.235 m. Yellowish-red clay; blackish-brown varnish. Elongated, ovoid shape with comparatively low neck and trefoil mouth (part of the neck and handles missing). Decoration: on the shoulder cross-hatched triangles with triple outlines, and swastikas in the spaces between the apices of the triangles, the rest of the body of the vase decorated with narrow and broad





Fig. 222. Geometric pottery.

bands placed so close together as to give the impression of red-figure technique. On the neck, the upper part of the mouth entirely painted, below two horizontal bands, below these a cross-hatched meander, then three horizontal lines, zig-zag, and, finally, three bands. The flattened foot is painted.

16. Jug (upper part of neck and handle missing). Square H 10 (fig. 222: 9). Preserved height 0.275 m, d. 0.22 m. Yellowish-red clay; blackish-brown varnish. Pressed-in base. Globular shape. Decoration: on the body of the vase, at the top, cross-hatched triangles with double outlines, then three bands, after that a zone with water-birds, towards the left, at the top and bottom intersecting, cross-hatched triangles as filling, then three bands, then a zone with small, cross-hatched triangles with double outlines, finally more bands and the lowest part entirely painted. The piece of the neck preserved is decorated with vertical lines and cross-hatched meanders, then three horizontal bands, a zone with cross-hatched triangles, and three bands near the junction of neck and body.

17. Jug. The acropolis, in the Geometric House (fig. 222: 6). H. 0.46 m, d. 0.225 m. Yellow clay; blackish-brown varnish. Elongated, globular shape with high neck and trefoil mouth, round handles from the lip to the shoulder. High ring foot. Decoration: on the shoulder cross-hatched meander, vertical strokes, a field horizontally divided by three lines with short dashes above and below, vertical strokes. After that, in a zone enclosed at top and bottom by three bands stars alternating with groups of vertical lines. Below, in the middle of the body, a broad zone with a large panel below the mouth, containing two geometric horses facing each other, with a four-petalled rosette within a square in between, as filling ornaments above the backs of the horses oblique dashes and rectangles divided into four parts, with a star in each compartment. Below the bellies of the horses groups of chevrons, in front of the horses and above the central square chevrons and triangular ornaments. On both sides of this central decoration is a ladder-pattern between two vertical lines on each side, after that cross-hatched meander-hooks, three vertical lines, four concentric circles, and so on. Below, three bands, alternating groups of crosses and lines, five more bands; the lower part is entirely painted. The foot is encircled by three bands. The upper part of the neck is completely painted, after that follow three bands and in a broad zone, starting from the handle, vertical lines, a band with dotted vertical lozenges, two vertical lines and a step-meander below the spout, and so on. The handle is decorated with vertical strokes.

18. Strainer for trefoil-mouthed jug. Square F 12 (fig. 222: 8). H. 0.045 m, d. 0.10 m. Yellow clay; blackish-brown varnish. Trefoil-shaped body, perforated, with basket handle attached in the middle. On the upper side, around the edge, a broad belt of varnish, the handles with strokes, the under-side unpainted.

19. High lid. Square F 12 (fig. 223: 2). H. 0.13 m, d. 0.215 m. Greyish-yellow clay;

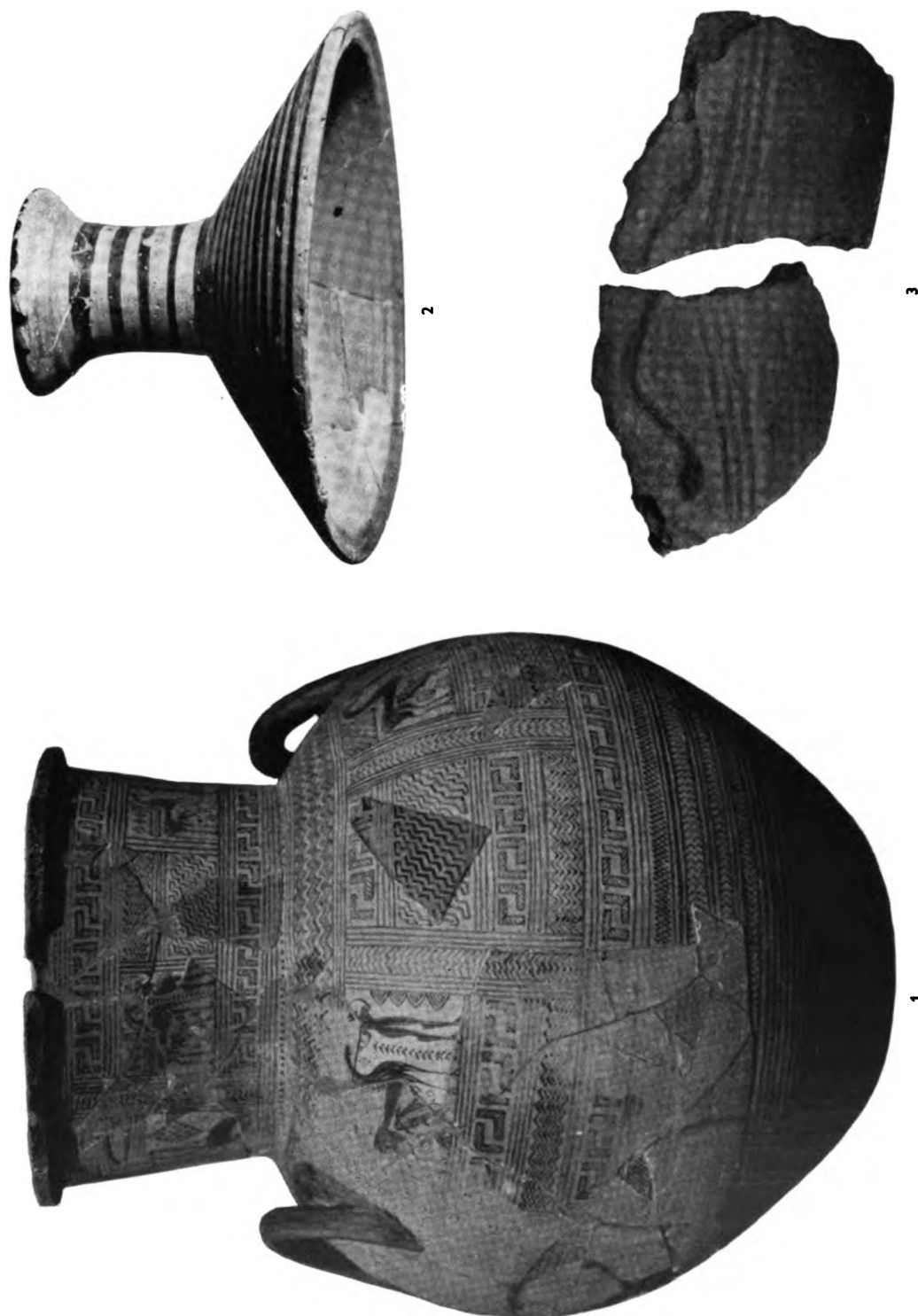


Fig. 223. Geometric pottery.



black varnish. From a concave rim the lid rises to a neck-like, hollow handle with a spreading top. Both lid and handle encircled with paint; the top is dashed.

20. Amphora (much restored). Main entrance to the acropolis (fig. 223:1). H. 0.80 m, d. 0.70 m, d. of the mouth 0.46 m. Rounded shape with two vertical handles rising from horizontal bases and a broad neck with collar or rim. Foot missing. The vase is entirely covered with geometric patterns. Decoration on the body of the vase, starting from the top: Below the neck a row of dots, then two bands, three parallel rows of cross-hatched zig-zags, three rows of lines, between the handles three large fields separated from each other by horizontal, short zig-zags between groups of four vertical lines on each side; within the fields, nearest the handles, there is at the top a horse with a man standing in front of it; the filling ornaments consist of latticed rectangles filled with dots above the back of the horse; below the horse's belly is a fish, a latticed triangle, a group of two or three concentric circles, and between the horse and the man, a group of chevrons. In front of the man is a row of latticed triangles; there are also some smaller filling ornaments strewn about the vacant spaces. Below, four horizontal lines, cross-hatched meander-hooks, four horizontal lines, six parallel zig-zags. In the central field, at the top, cross-hatched meander-hooks, then four horizontal lines, step-meander, four horizontal lines, cross-hatched meander-hooks, four horizontal lines, five parallel zig-zags. Below these panels, round the entire vase, run three bands, then cross-hatched meander-hooks, three bands, some network, three bands, some vertical, short zig-zags, three bands, chevrons facing to the right, three bands, hooks facing to the left, and, finally, more bands. On the neck are four rows of lines at top and bottom. The broad field between these is divided by ornamental bands of the same kind as those described between the fields on the body of the vase in such a way that there are panels above the handles with the following decoration: at the top zig-zags, then four horizontal lines, some network, four horizontal lines and two water-birds facing each other, with necks very much stretched out and some serpentine objects in their beaks, above the backs of the birds lozenges containing crosses and with dotted lozenges in the corners and smaller filling ornaments in the vacant spaces. Between the handles, above the large fields on the body of the vase, corresponding to those on the neck, are three fields here enclosed at the top and bottom by cross-hatched meander-hooks and four horizontal lines, those to the right and left containing a representation of a horse and man as on the body of the vase. In the central field, at the top, six horizontal, parallel zig-zags, four horizontal lines, and then step-meander. The outside of the collar of rim is decorated with network. The handles have been restored.

Fig. 223: 3 represents two pithos fragments with a snake and three lines in relief. Coarse, grey clay; thickness 0.035 m.

Immediately above the entrance, close to a buttress of the wall which runs up to the acropolis, was found in the Geometrical house a deposit of vases (fig. 224).



Fig. 224. Geometric pottery.

1. Amphora. H. 0.41 m, d. 0.17 m. Oblong, ovoid body of vase with high neck and rimmed mouth. Comparatively high foot. Two handles from the middle of the neck to the shoulder. Yellowish-red clay, blackish-brown varnish. Decoration: At the very top of the shoulder, a narrow zone with vertical wavy lines, then three bands, a row with Argive birds at a height with the lower fastening of the handles, after that three bands, goose-eye pattern and thinner and broader bands down to the very much

tapering foot. On the neck, a broad belt between three horizontal bands: From the handle reckoned three vertical lines, two meandering hooks filled with lines, then ladder-pattern between three lines. The upper part of the neck is painted, on the rimmed mouth groups of vertical strokes. On the handles crosses between horizontal lines. The upper part is barred.

2. Jug. H. 0.205 m, d. 0.14 m. Spherical body, low neck with trefoil mouth, flat handle from rim to shoulder. Flat base. Greyish-yellow clay, reddish-brown varnish. The whole vase painted with the exception of groups of bands left bare around the lower part of the neck and in the middle of the body of the vase. On the handle, horizontal strokes.

3. Jug. H. 0.24 m, d. 0.16 m. Shape as last but with broader neck. Yellowish clay, blackish-brown varnish. The whole vase is decorated with thin bands with the exception of the upper part of the neck and the lower part of the body of the vase, which are wholly painted. In the middle of the neck, and at a height with the lower part of the fastening of the handle, two zig-zag lines.

4. Cup. H. 0.125 m, with handle 0.165 m, d. 0.16 m. Hemispherical body with high upright rim. Flat base and two high, flattened handles which run in a loop rising from the rim to the shoulder (Minyised type). Yellow clay, reddish-black varnish. Decoration: On the body at a height with the lower fastening of the handle a broad belt with triglyphic and metopic division, alternating with three vertical lines and high, latticed arcs with double outline, below there are three bands. The lower part of the vase is wholly painted. On the rim, between two bands, filled running spirals. The handle with crosses between horizontal lines. The inside altogether painted with the exception of the edge.

5. Open bowl. H. 0.08 m, d. 0.13 m. Low shape with high flaring rim and two loop handles from the middle of the body. Flat base. Greyish-yellow clay, black varnish partly worn off. The whole vase painted, except the rim, which has three bands reserved.

6. Open bowl. H. 0.085 m, d. 0.14 m. Shape as last but higher and the rim more vertical. Reddish clay, black and red varnish. In the handle-zone triglyphic and metopic division with vertical groups of strokes and natatorial birds alternating. The lower part of the vase and the handles altogether painted, the rim with three bands. The inside painted.

7. Cup. H. 0.068 m, d. 0.122 m. Hemispherical body with low, straight rim. Flat handle set vertically on the rim in a loop to the body. Yellow clay, red varnish. Altogether painted with the exception of a reserved line on the edge of the rim and handle, which has a wavy line.

8. Cup. H. 0.066 m, d. 0.12 m. Shape as last but more closed. Yellow clay, red varnish, partly worn off. Altogether painted with the exception of the handle, which has a wavy line.



9. Cup. H. 0.06 m, d. 0.11 m. Shape as last. Yellowish clay, black varnish. In the handle-zone metopic and triglyphic division with groups of narrow vertical lines alternating with broad full lines. The lower part of the body is entirely painted. On the rim three bands. On the handle, at the top, vertical strokes, at the bottom horizontal ones.

10. Cup. H. 0.073 m, d. 0.12 m. Shape as last but higher. Greenish-yellow clay, blackish-brown varnish. Decoration on body as last. The low rim is unpainted. The handle is ribbed horizontally.

11. Cup. H. 0.08 m, d. 0.115 m. Shape as last but with high, straight rim. Yellowish clay, reddish varnish. Altogether painted except the rim, which has a row of dots.

12. Ladle. H. 0.075 m, with handle 0.115 m, d. 0.105 m. Hemispherical body with flaring rim and rounded bottom. Loophandle rising upwards in a high loop from the rim to the body. Coarse, red clay, undecorated.

This closed find is of interest because it shows that the frequently occurring forms of bodies at Asine occur simultaneously and can, therefore, not without any further ado be used as a dating criterion.

### MISCELLANEOUS FINDS

Amongst the minor finds from the Geometric period met with here may only be cited a couple of the most important ones.

Up on the topmost terrace of Mt Barbouna was found close to the foundation walls excavated there, cf. above, a small lead statuette. H. 0.027 m, breadth 0.013 m (fig. 225: 1). This shows a figure of the so-called Apollo type, with a straight-running wig at a height with the shoulder-blades and side-locks in front.

Furthermore, there were found sundry small clay statuettes of a previously known kind, e. g. from Tiryns (fig. 225: 3—5).<sup>1</sup> The eyes are plastically modelled and even the hair as well as ornaments added later on. The arms are held stretched out and the feet protrude at the bottom. Still more richly ornamented has been a statuette found in the Geometric house on the acropolis. Its necklaces attract attention.

In a favissa to the right of the entrance, sherds of terracotta statuettes were found, some of which could be put together (fig. 225: 6—7).

Furthermore may only be mentioned a bronze arrow-head, l. 0.03 m, found on the acropolis in the Geometric house (fig. 225: 2). The arrow-head is provided with a barb and a socket for a wooden shaft.

<sup>1</sup> Cf. also Valentin Müller, *Frühe Plastik in Griechenland und Vorderasien*, especially figs. 312—14.

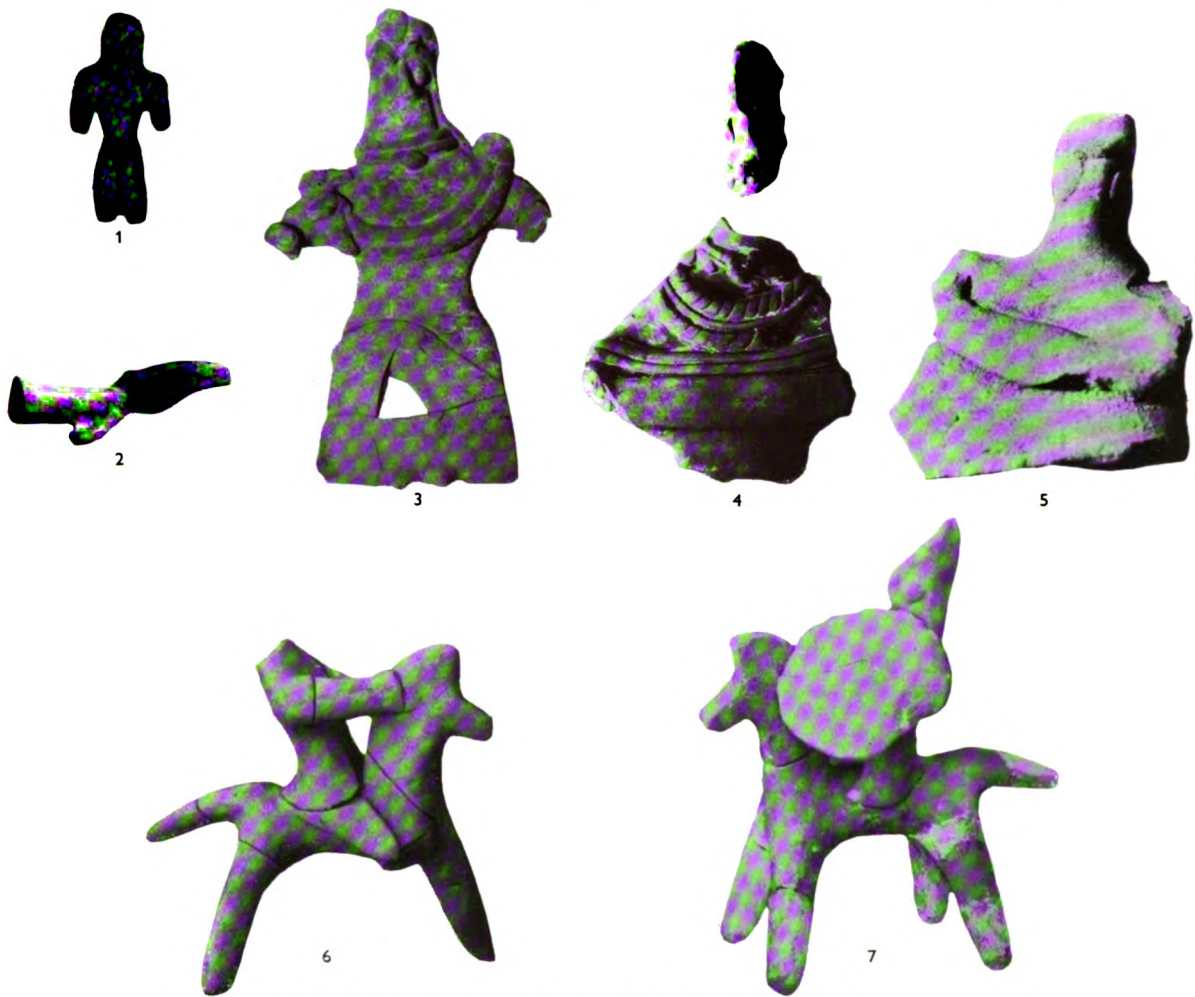


Fig. 225. Miscellaneous objects of the Geometric period.

## HELLENISTIC POTTERY

During the Classical period, there was no settlement at Asine, and only a few sherds can be relegated to the same.

In the Hellenistic settlement in the Lower Town have been found some vases, but the majority of these do not present anything of particular interest; most of them are cooking vessels. The locality was in those days chiefly inhabited by agriculturists and fishermen, of which press arrangements and fishing tackle found bear witness.

Our fig. 226: 1—2 shows two cooking pots with rounded bottoms set up on rings and coarse tripods. In a cistern in Square C 5 was found a jug (fig. 226: 3) which as to its handle is obviously a metal imitation. Our fig. 226: 4 shows a low, open bowl without handle, covered with a glossy, black varnish and provided with a star



Fig. 226. Hellenistic pottery.



impressed by means of a stamp on the inside of the bottom. Fig. 226: 5 reproduces a »lagynos», a type of vase<sup>1</sup> particularly characteristic for the second half of the 3rd century B. C. until shortly before the beginning of the Christian era.

In a Hellenistic wall were found three small cups with two or three handles enclosed in the very wall (fig. 226: 7), obviously a votive offering to the building (cf. Mycenaean votive offerings to buildings in the preceding, p. 311). Near the great tower, close to the main entrance, was found another collection of cups, larger and smaller ones, coarsely made and most of them undecorated, only one of them having a hastily done decoration consisting of black bands and around the rim a row of heart-shaped leaves with white spots applied to the centre of the leaf. Some high, narrow flasks (fig. 226: 6), so-called perfume bottles, may also be mentioned, and these are made of greyish-black clay, each one with three thin, white bands round the neck and body. Fig. 226: 8 shows a stand of a fairly large number of lamps made of clay, most of them dating to the 2nd and 1st Century B. C., but also some from the Christian era have been found.

### MISCELLANEOUS FINDS

We are able to date to the Hellenistic minor finds inter alia a clay mould for casting a flute-playing satyr, and several typically Hellenistic female heads, as well as a seated female figure which has had loosely set-on, jointed arms. To this may also be dated a small fragment of a terracotta relief showing the body of an upright female figure. Here is also reproduced a lead for a sling, a net sinker, and two bronze fish-hooks (fig. 227).

On a fragment of a tile is impressed the inscription *Damoioi*, furthermore three minor fragments of parts of inscriptions have been found. As space will not permit an exhaustive treatment of this material, the publication of this material must be put off, as must also an interesting group of loom-weights with both incised letters and gem-impressions.

## T o m b s

### EARLY HELLADIC TOMBS

Though considerable settlements of Early Helladic date have been investigated in different quarters, we possess for the present an extremely limited knowledge of the burial customs of the period. This is undoubtedly due to the fact that the dead were buried extra-murally, whereas the custom of intra-mural interment, especially for children, plays a prominent part during the ensuing period.

<sup>1</sup> Cf. Ducati, *Storia della ceramica graeca*, p. 486 ff.



Fig. 227. Hellenistic miscellaneous finds.

The first Early Helladic tombs known were found by chance in Old Corinth, in the year 1896.<sup>1</sup> These are rock-cut tombs, in type very reminiscent of those excavated by Papavasileiou in Euboea, consisting of a chamber which opens from a vertical shaft cut out of the rock.<sup>2</sup> But the tombs at Old Corinth differ from these in possessing two tomb-chambers, which open on opposite sides of the same rectangular, vertical shaft.

Neither at Korakou, Goniá nor Eutresis, in spite of the rich Early Helladic finds made at these places, have any tombs belonging to this period been so far brought to light; this is certain because they must be sought outside the settlement proper. On the other hand, some tombs which are certainly Early Helladic, were found during the excavations at Zygouries, on the slope of a hill, Ambelakia. Altogether 57 tombs were investigated there, of which 3, or possibly 4, are of Early Helladic date.<sup>3</sup> These tombs are of quite a different kind from those at Old Corinth. The Zygouries tombs have rightly been described as ossuaries, and consist of fairly large cavities in the rock, »roughly oval in shape», with from 3 to 15 skeletons in each tomb. Blegen discovered a similar tomb in the Argive Heraeum, but this has not as yet been published.<sup>4</sup> To this category might also be referred a tomb from Dimini, in which Tsountas found several skeletons, of which some obviously in position, together with a three-handled, squat bowl, with lattice-pattern in glaze-paint on the shoulder; the vase is hand-made and of the same type as that found in Early Helladic III at Asine.<sup>5</sup> This type of tomb has analogies only in Crete, represented variously by the cave burials at Epano Zakró, and the rock-shelters of Palaikastro, Gourniá, Mochlos, Pyrgos, Hagia Photiá, etc.<sup>6</sup>

Asine has given us two or three Early Helladic tombs, which represent still another type, single tombs in cavities in the rock. Nevertheless, it is only children whose skeletons have been found in natural shallow cavities; in one case the cavity had clearly appeared too big, and had been lined with stones. Both tombs were found on the acropolis, not far from each other, on the so-called »pre-Mycenaean Terrace» (figs. 228 and 229).

I. Square cavity or depression in the rock about 0.90 m square; The northern edge of the tomb is marked by a simple row of stones, below which the cavity continues towards the north. About 0.40 m below the surface of the ground were found remains of a child's skeleton, thin chips of the skull, which had clearly been crushed by the superimposed layer of soil, and remains of tibiae and femorae. Orientation E.—W. The remainder of the contents in the tomb consisted of three bowls, one

<sup>1</sup> A. J. A. I, 1897, p. 313 ff.

<sup>2</sup> Papavasileiou *Περὶ τῶν ἐν Ἐγβοίᾳ ἀρχαίων τάφων*, p. 2 ff. and Pls. I, III, etc.

<sup>3</sup> Blegen, Zygouries, p. 42 ff.

<sup>4</sup> Zygouries, p. 54, No. 2.

<sup>5</sup> Tsountas, *Διμήνη καὶ Σέσλιον*, p. 125 and fig. 29.

<sup>6</sup> Blegen, Zygouries, p. 214.



of which was crushed, and two whole and two half obsidian knives, which lay in the crushed bowl (fig. 229).

1. Shallow bowl; partially glazed ware (fig. 230: 1). H. 0.065 m, d. 0.115 m. Low and open type; the wall rises without any curvature obliquely upwards at an angle of about 30° from the horizontal plane to the relatively narrow rim, which has a slight inward curve; ring foot. Yellow clay; red paint in the interior, and on the exterior only at the rim.

2. Shallow bowl; unpainted ware (fig. 230: 2—3). H. 0.055 m, d. 0.14 m. Shape as last; low, narrow ring foot which has been carefully worked together with the body — both inside and out can be seen marks of finger nails or of some sharp object. In

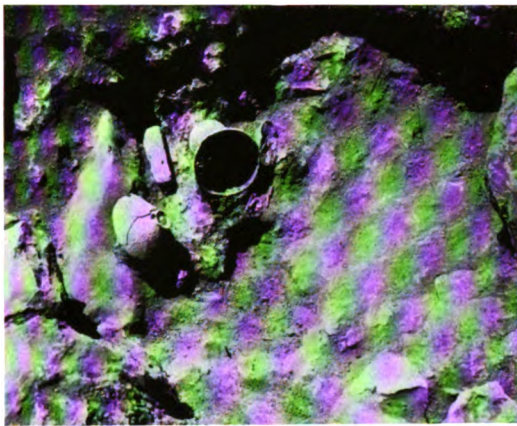


Fig. 228. E. H. tomb on the 'pre-Mycenaean terrace'.

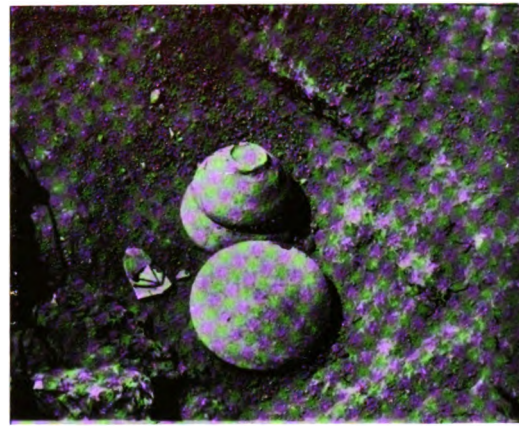


Fig. 229. E. H. tomb on the 'pre-Mycenaean terrace'.

the middle of the base, on the outside, a raised boss has been caused when pressing together the foot and body. Yellow, poorly cleansed clay with a finer slip, which has flaked off in places. The surface seems to have been finished with a wet rag.

3. Shallow bowl; unpainted ware (fig. 230: 4). H. 0.027 m, d. 0.07 m. Slightly convex sides rise from a broad, faintly rounded base; no rim or foot. Yellow clay.

4. Two whole knives of obsidian, respectively l. 0.055 m, br. 0.013 m, and l. 0.06 m, br. 0.008 m, as well as fragments of two others (fig. 230: 5).

II. In a shallow cavity in the rock, about 0.90 m × 0.40 m, were found extremely scanty remains of a child's skeleton, together with three bowls (fig. 229).

1. Shallow bowl; partially glazed ware (fig. 231). H. 0.055 m, d. 0.115 m. Inverted conical shape with slightly convex sides and straight, sharply cut-off lip; low ring foot. The inside is coated with thin, brownish varnish, the rim of the mouth with thick, black varnish. The protuberances on the body of the vase, very noticeable on fig. 229, which shows the vase in its original position, might easily lead one to believe, erroneously that it was wheel-made. The technical finish reminds one very much of some Trojan wheel-made vases, belonging to »die zweite Bauperiode der II. Ansie-

delung».<sup>1</sup> On making a closer examination of our bowl from Asine, however, it becomes clear that it cannot really have been wheel-made, though possibly on a false potter's wheel: The effect produced depends upon an even horizontal rubbing. Coarse, greyish-brown clay, with washed or rubbed surface.

2. Shallow bowl; partially glazed ware. H. 0.045 m, d. 0.135 m. Very shallow shape



Fig. 230. E. H. tomb-group from the «pre-Mycenaean terrace».

with vertical rim and low ring foot. Yellow clay with smoothed surface. Inside coated with thin glaze-paint.

3. Shallow bowl; partially glazed ware. H. 0.045 m, d. 0.15 m. Very shallow shape without rim and with abruptly cut-off sides; slightly flattened base. Reddish-yellow clay, with smoothed surface. Coated inside with thin glaze-paint.

The contents of the tomb show that both these tombs belong to E. H. III. No



Fig. 231. E. H. tomb-group from the «pre-Mycenaean terrace».

remains of contemporary settlement have been found in the vicinity of the tombs, and we are surely entitled to consider them as extra-mural.<sup>2</sup>

III. We have certainly the site of a similar Early Helladic tomb on Terrace III, in the Lower Town. In Room II of House R was found, close to, and partly below,

<sup>1</sup> Cf. Dörpfeld, *Troja und Ilion I*, p. 254, fig. 121 f., and *Königliche Museen zu Berlin, Heinrich Schliemann's Sammlung Trojanischer Altertümer beschrieben von Hubert Schmidt*, p. 44 f. These vases are undoubtedly wheel-made, which is by no means calculated to cause surprise, since Troy II, 2 certainly lasts well into the 2nd millenium B. C. — But it would be very astonishing if some of the Early Helladic pottery at Eutresis, as Miss Goldman asserts, is really wheel-made.

<sup>2</sup> Miss Goldman asserts that at Eutresis she found a child's tomb of Early Helladic date. It lay «in virgin soil and directly under a clay floor», from which she draws the conclusion that even during the E. H. period children's tombs «were sometimes placed directly under the floors of houses» (Eutresis, p. 221). The conclusion strikes me as by no means inerrable: the tomb may very well be Middle Helladic — we have found such at Asine cut through Early Helladic floors. I am confirmed in my opinion that the Eutresis tomb is Middle Helladic, of the type of tomb mentioned on p. 226, by the description given, that the body is «bedded on small stones». It is this very stone-bed that is the characteristic of Middle Helladic tombs (cf. p. 146), and holds good at Asine likewise for the two Middle Helladic tombs that had been cut through the floor of an Early Helladic house on the «Polygonal Wall Terrace».

the eastern wall, a cavity in the rock, resembling a bath-tub about 0.70 m  $\times$  0.30 m. The tomb must, therefore, be older than the house, and was probably destroyed, and possibly plundered when the house was erected.

As this type of tomb is now known, thanks to the Asine tombs, Blegen's assumption gains in force, viz. that some shafts in the Ambelakia cemetery were originally Early Helladic graves, which were cleaned out in Roman times, in order to be used again for burials.<sup>1</sup>

We now know three types of Early Helladic tombs:

- A. Ossuaries: Zygouries, Argive Heraeum, Dimini;
- B. Cavities in the rock intended for a corpse: Asine, Zygouries (?);
- C. Chamber-tombs in conjunction with vertical shafts: Old Corinth.

Of these types the first one has analogies in Crete, the last one in Euboea. Type B is the simplest, the cavity in the rock corresponding to a simple earth-grave, possibly a cist-tomb. This type occurred more frequently, and the cist-graves in the Cyclades are undoubtedly in part contemporary with the Asine tombs.

None of the Early Helladic tombs hitherto discovered is rich in finds, even if all of them seem to have contained burial gifts. The pottery is poor throughout; vases of the best quality, which are often found in the settlements, have so far not been found in the tombs. The question of the relation of the different types of tombs, whether they succeed one another or are contemporary, is, in view of the scanty material not easy, if not impossible to answer. It seems, however, to judge from the pottery, as if the latter alternative were the right one, and I for my part am inclined to date all hitherto known tombs to E. H. III. The pottery from the tombs at Old Corinth certainly gives an impression of antiquity, but this is due chiefly to its rough finish; note the shallow bowl I, 8. Besides, we are certainly entitled to expect in Corinth a certain similarity to Euboea, not merely as regards the burial customs themselves, but also in the pottery, cf. e. g. Old Corinth I, 11 with Euboea, Pl. II, Old Corinth II, 2 with Euboea, Pls. V, VII ff.

## MIDDLE HELLADIC TOMBS

### SUMMARY OF MATERIAL

The following types of tombs occur at Asine during Middle Helladic times.

- I. Shaft, cut in the rock, »rock-cut»;
- II. Shaft, cut in earth, »earth-cut»;
- III. Built of stones or sometimes of rough bricks, rectangularly around the dead, »enclosures»;

<sup>1</sup> Zygouries, p. 54.



- IV. Cist, a. of small stones or flat slabs placed upon one another,  
 b. of large ashlar blocks placed on edge,  
 c. of double rows of tiles placed on edge, with a filling between;

V. Pithos tombs.

Orientation	Rock-cut			Earth-cut			Stone enclosure			Cist			Pithos	Total
	Child	Adult	Uncert.	Child	Adult	Uncert.	Child	Adult	Uncert.	Child	Adult	Uncert.	Child	
	1	2		45	9	12	1	1	3	5	12	8	6	105
E.	1			1		1	1			2				6
S.E.				1	1					3	1			6
S.		1			2									3
S.W.				5	3					3	2			13
W.										1			1	2
N.W.				1	1	1				1	1			5
N.				4		2			3	3	1			13
N.E.				3		1				3				7
Uncert.														50

The Asine tombs are designed each for a single person, with the exception of the interesting tomb 52—53. This dates to M. H. III, as the sherds in the stratum around the skeletons clearly show, and, consequently, can have nothing to do with Early Helladic ossuaries. Besides, the position of the skeletons show that the two corpses were buried simultaneously.<sup>1</sup> For explanation, cf. the author's *The Royal Tombs at Dendra near Midéa*, p. 68.

What is most astonishing is the proportionately very large number of children's tombs, altogether 58, in comparison with adults tomb's, altogether 23 — one tomb was empty — i. e. 72 % who are not adults, most of them infants. I can find no reasonable explanation of this fact other than that during Middle Helladic times also extra-mural burials were customary, at least for adults. The intra-mural ones occurred chiefly in the case of children, and are probably, as Frazer hinted, connected with an idea of re-incarnation.<sup>2</sup> That extra-mural burials were probably made in separate cemeteries is also shown by Blegen's excavations at Zygouries, where, at Ambelakia, which had served as a cemetery from Early Helladic to Roman times,

<sup>1</sup> For other cases of simultaneous burial, cf. Blegen, *Zygouries*, p. 56 f., cf. also Tsountas, *Διμήρι και Σέστρον*, p. 128.

<sup>2</sup> Frazer, *The Fear of the Dead*, p. 18, and the literature quoted there.

he also found Middle Helladic tombs. The extra-mural cemetery at Asine might be looked for on the cultivation terraces on the south-eastern slope of Mt Barbouna, between the Geometric and the Mycenaean Necropolis, where some few Middle Helladic sherds can be found.

The contracted position of the corpse, »Hocker-lage«, is characteristic of all types of Middle Helladic tombs. On the other hand, there are different degrees of contraction, from that in which the knees are drawn up to the chin and the back is strongly bent, to that where the trunk and thighs lie in an extended position, and only the lower extremities are bent. A closer study seems to me to show that the latter type is the latest; it seems to belong in Middle Helladic III, and to form the transition from the proper contraction of the older periods of the Mycenaean period, when, as a rule, the extended position was employed. It seems as if the inherited short form the tomb must have caused this bending-up of the lower extremities after the change had been made from the sideways position of the corpses proper to the semi-contracted position on the back. Besides, there are exceptions to the contracted position in, for example, Tomb 18, where the skeleton lay on its back and the legs were only slightly bent outwards — originally the corpse had probably lain with the bent knees straight up. By the rich finds within it we see that it is one of the latest cist-tombs at Asine, the transitional stage between these and the oldest of the shaft-graves at Mycenae.

From the summary it has been made sufficiently clear, that the dead were not laid out facing any one point of the compass. A certain predilection might be mentioned for placing the head towards the east and north, rather than west and south. But the analysis of the results is not such that it is possible to lay down any rules either for certain types of tombs or for the various epochs within the period. The orientation seems in many cases to depend upon the conditions of the ground, chiefly in tombs which rest directly on the bedrock, and where the covering of earth has been too thin: when the tomb lies on a slope, the head is as a rule higher than the legs. Nor does there seem to be any definite rule in regard to the placing of the corpse on its side. A diagram of the cases ascertained shows the following result:

Position	Rock-cut	Earth-cut	Stone enclosure	Cist	Pithos	Total
On left side..		7	4	11	1	23
On right side	2	4	1	7		14
On the back..		6		2		8

It may, however, be seen from this diagram that the position on the left side is more common than that on the right.<sup>1</sup> But it is worth while to point out that the

<sup>1</sup> This coincides with Tsountas' observations, *Διμήνη και Σέσολον*, p. 127: συγχύσεων ἐπὶ τῆς ἀριστερᾶς (sc. πλευρᾶς).

opposite was the case in another cultural area where the contracted burial was customary, namely in the Danube area — cf. G. Childe, *The Danube in Prehistory*, p. 148. Mention has already been made of the position of the body on its back.

As regards the position of the arms, it might be worth mentioning that the pudica-position is the one that we meet in more than half the cases, where the position of the arms could be determined: one hand on the chest or the arm bent at right angles to the thorax, the other hand in front of the pelvis.

Positions of arms	Rock-cut	Earth-cut	Stone enclosure	Cist	Total
Left hand over pudendum, right on breast	—	3	—	6	9
Right hand over pudendum, left on breast	2	1	—	3	6
Both hands over pudendum .....	—	—	—	1	1
Both hands on breast .....	—	1	1	2	4
Both hands over face .....	—	1	—	—	1
One hand over face, one on breast.....	—	1	—	2	3
Both arms along sides .....	—	—	—	1	1

The diagram thus shows that the pudica-position was used in 16 cases out of 25 that could be ascertained. This observation may not be without significance for the discussion regarding pudica-representations in Art, which has lately been referred by Blinkenberg to Cypriot influence.<sup>1</sup>

The first four types of tombs, I—IV, certainly constitute a typological series, but it would of course be incorrect to try to deduce from this a time sequence. The first type, shaft cut in the rock, which, at least ostensibly, directly follows the Early Helladic type of tomb now known from Asine, strikes one as belonging to the beginning of the Middle Helladic period — that the type belongs also to Middle Helladic times is proved by the contracted position, and still more so, in one case by the contents of the tombs, and likewise by the fact that some tombs are provided with bottom layers of pebbles a detail which to judge from the discoveries at Asine is not found earlier than the Middle Helladic tombs.<sup>2</sup>

The stone-enclosed tombs also, which represent a preliminary stage of the cist-tombs considered, typologically, seem to belong to the beginning of the period, which nevertheless does not do away with the fact that we possess actual cist-tombs as early in date as the simpler stone enclosures. As the covering ashlar blocks in many cases have disappeared, there may occasionally be some doubt as to which type the

<sup>1</sup> Cf. Blinkenberg, *Knidia*, p. 204 ff.

<sup>2</sup> As to a presumed Early Helladic tomb from Eutresis, see above, p. 340.



tomb should be described, but in such cases the height of the enclosure has had to decide the matter.

As regards the bottom layer of pebbles, it is found that this occurs in all the four types of tombs, and the same holds good for the burial gifts.

	Rock-cut	Earth-cut	Stone enclosure	Cist	Total
Pebble bed.....	3	4	1	13	21
Burial gifts .....	1	6	1	8	16
Pebble + burial gifts .....	1	1	1	4	7

The bed of pebbles and the occurrence of burial gifts do not therefore give evidence about the age of the various types of tombs. The table also shows that these two phenomena have no interrelation with one another. As to the pebble beds, it can, nevertheless, be clearly seen that they are most common, from a percentage point of view the tombs which in other respects also needed the greatest care, in construction, the cist-tombs. The same holds good to some degree also for the burial gifts. But this only goes to show that the cist-tombs were the finest and richest during the period, as they seem, as the table on p. 142 ff. shows, to have been intended to a greater degree for adults — infants have been found only in a few cist-tombs, whereas a very large percentage of earth-cut tombs contained infants.

It should be mentioned that some of the cist-tombs (Nos. 29, 60, 82, 104), and also one of the rock-cut shaft-tombs (No. 54) have not only a rectangular interior shape, but also by the construction of stone-enclosures on a level with the cover slabs, obviously shows the endeavour to create a circular or elliptical form. These stone-enclosed tombs at Asine have certainly no very large dimensions, at the most 2 m in diameter, but they are nevertheless of interest, since by them one might trace kinship with the famous Middle Helladic tombs at Leukas, with their round rings.

The table on p. 346 gives a survey of the distribution of the types of tombs and the different sexes of their occupants, as well as the nature of the gifts.

It can be seen that burial gifts are relatively rare in Middle Helladic tombs — only just over 16 % of the Asine tombs contain them — but, on the other hand, all the first four types of tombs are present. If we look at the distribution for different sexes, we find that we have 4 men, 5 women, 1 double tomb with a man and a woman, 3 children's tombs, and 3 undefined ones — the sex has been determined after thorough investigation of the skeletal material — i. e. a fairly even distribution. The nature of the burial gifts in the tombs for men and women shows that a certain amount of care and circumspection should be exercised in drawing conclusions from the above as to the sex of the dead: male tomb No. 23 contained a whorl; male tomb No. 63 a long, broad bone-awl or hair-pin (?). One is therefore not entitled to draw

Tomb No.	Type <sup>1</sup>	Sex	Vase	Spindle whorl	Spear-head	Tweezers	Earrings	Arrow-head	Awl	Others
4	Cist*	?	Jug							
18	Cist	Child	3 Jugs Cup							Purple shell Fishbones
20	Cist*	Woman	Cup							
23	Earth-cut	Man		Conical						
31	Earth-cut*	Man	Jug							
32	Cist	Child	Jug							
34	Cist*	Child	Cup							
38	Earth-cut	?	Cup							
52—53	Earth-cut	Man & Woman				Fragment				Yellow Minyan sh.
58	Earth-cut	Man			Double-edged					
60	Cist	Woman		Flat						
63	Cist*	Man							Long, broad	
74	Rock-cut*	Woman		Flattened ball						
80	Cist	Woman	Jug							
98	Stone* enclosure	Woman	Jug	High, blunt			2 ear-rings		Short, broad	Goat- or sheep bones

<sup>1</sup> An asterisk indicates that the tomb has a bottom layer of pebbles.

conclusions without any further data and merely from such attributes as are looked upon as female, as to the female sex of the dead.

The tombs containing burial gifts are distributed over the whole Middle Helladic period. Amongst the richest, No. 98 belongs to Middle Helladic I, and No. 18 to Middle Helladic III. The last-mentioned, with its rich assortment of pottery, is closely allied to the shaft-grave period.

Before we pass on to a more general treatment of the Middle Helladic tombs, we must deal for a moment with some stone rings that had originally been called tombs, but which the course of the excavations has shown to be of another character.

1. Close to Tomb 14, was found a small square enclosure of stone similar to a cist-tomb, with flat slabs of stone placed on edge. The length between the outer edges of the stones was about 0.90 m, the width slightly more than 0.50 m. The enclosure contained no skeleton, but charcoal and ashes were found in the vicinity.

2. Just north of Tomb 21, and on a level with this was found a stone enclosure, which, to judge by appearances, should also have been a tomb. When the enclosure was cleared out no bones were discovered inside it, but charcoal and ashes were present in the soil inside and around it.

3. Very close to Tomb 59, on Terrace III, was found a stone enclosure which was assumed to be a tomb. Among the stones were discovered charcoal and ashes, above them some Middle Helladic sherds, and below them some Early Helladic ones. When it was cleared there was found that it was not a tomb. Amongst the stones were found half a stone-axe as well as traces of charcoal and ashes.

1. In clearing away some stones in the vicinity of Tomb 63, on Terrace III, and just east of it was discovered a small square of stones. This enclosure was found to be empty. Close by were traces of charcoal and ashes.

The traces of charcoal and ashes found in conjunction with these enclosures make one first think of hearths, but this idea should be discarded. For they are not situated in rooms, nor yet in corners of a wall or close to walls as outdoor cooking places used to be. I consider them tomb-altars, and combine them with the following notes on Tomb 29: »In the south-west, above the tomb, an accumulation of rather small rough stones on a bed of coarse gravel, which also extends to the eastern side of the tomb. When the stones and gravel had been removed remains of charcoal were found, and also in the 8 cm thick layer of soil above the cover-slabs». In this case also no traces of surrounding walls were found, and, consequently, the idea of a hearth and flooring is out of the question.

Such tomb-altars, as far as I am aware, have not previously been observed in connection with Middle Helladic tombs. Nevertheless, in my opinion it must be assumed that similar tomb-altars occurred in Shaft-grave XIII, at Aphidna. S. Wide describes this tomb in the following manner: »Schachtgrab, dessen oberer Rand mit Steinen eingefasst war. Diese Steinsetzung wurde teilweise zerstört, als die Gräber I und III angelegt wurden. Hier und da, besonders an den Wänden, lagen Kohlenreste.»<sup>1</sup>

They are thus the direct predecessors of the tomb-altar found by Schliemann over the Fourth Shaft-grave at Mycenae, and further confirm the opinion first advanced by Karo and Fimmen, and lately by Blegen and Wace, that the shaft-graves at Mycenae represent a direct development of the Middle Helladic tombs.<sup>2</sup> That also gives a far stronger support to the opinion put forward by Blegen and Wace that

<sup>1</sup> Ath. Mitt. XXI, 1896, p. 396.

<sup>2</sup> Cf. Middle Helladic Tombs, Symbolae Osloenses IX, 1930, p. 31.



offerings were made to the dead during Middle Helladic times, than the sacrificial pit which Sotiriades found beside the tomb at Drachmani in Phocis.<sup>1</sup>

Finally, I should like to draw attention to Tomb 54. This consists of a relatively large shaft carefully cut in the rock, with a bottom layer of pebbles, carefully covered over with two slabs, with smaller stones at the side. The remarkable thing about this tomb was that no bones whatever were found in the same. From the experience I have of the tombs at Asine, I venture definitely to maintain that this circumstance cannot be explained by the assumption that the skeleton has altogether decayed. Nor do the carefully placed cover-slabs make it probable that the corpse could have been removed during the erection of the Middle Helladic III house, below whose northern wall the tomb partly lies. I for my part do not hesitate to interpret it as a cenotaph, a Middle Helladic predecessor of the well known Late Helladic cenotaph at Dendra.<sup>2</sup>

### *BURIAL CUSTOMS DURING THE MIDDLE HELLADIC PERIOD*

The material available from Asine is not plentiful though the most extensive hitherto collected from any one place, and it hardly permits of any general conclusions, even when supplemented and compared with the material available from other sites. For I am convinced that insignificant earth-tombs, containing infants, might easily have been allowed to pass unnoticed unless the workmen were closely supervised. An investigation, for example, of the frequency of the different types of tombs might, therefore, very easily be misleading — of course in favour of the cist- and pithos-tombs. I therefore confine myself to the brief synopsis of Middle Helladic tombs which Blegen and Wace have made.<sup>3</sup>

As far as it has been possible to judge hitherto, the burial customs on the whole remained the same during the whole Middle Helladic period, and for the time being there is no possibility of accurately determining the age of earth-cut and cist-graves. But it seems as if the rock-cut shaft-graves, and those surrounded with a simple stone enclosure, belonged to the beginning of the period. Thus, for example, the partly rock-cut grave 71 lies partly below the cists Nos. 72 and 73. On the other hand, earth-cut graves are found on precisely the same level, very close together, e. g. Tombs 32 and 33, 4 and 50, 72 and 93.

When Blegen and Wace declare that earth-cut and cist-graves »almost invariably» were covered by one or more large, thin slabs, this is an assertion that must be greatly modified. Not a single one of the 66 earth-cut graves that we have from Asine was found to have such cover-slabs, but in five instances a layer of small stones was

<sup>1</sup> Eph. Arch., 1908, p. 94 ff.; *Symbolae Osloenses* IX, 1930, p. 35.

<sup>2</sup> Cf. Persson, *The Royal Tombs at Dendra*, p. 108 ff.

<sup>3</sup> *Symbolae Osloenses* IX, 1930, p. 29 ff.

visible above the grave; their extent and nature, however, showed that these should be described as in another case, Tomb 24, where a similar tomb was found immediately below the lime floor. Nor do Blegen's and Wace's assertions hold good for Eleusis either.<sup>1</sup> One case, Tomb 39, should perhaps be considered as a combination of earth-cut and pithos-grave — a child's skeleton being found below a large, coarse fragment of a pithos.<sup>2</sup> On the other hand, I feel inclined to explain the absence of cover-slabs in several of the actual cist-tombs by the fact that Middle Helladic Asine was unusually thickly populated, and, that, consequently, the cover-slabs might easily have been removed later for some other purpose.

A certain continuity between Early and Middle Helladic burials can perhaps be traced in the rock-cut shaft-graves, but such a connection or relationship is by no means certain, because the rock-cut shaft is only a development of the natural cavity and the earth-shaft, both types of tombs common over wide areas. As long as we know nothing of the position of the skeleton in Early Helladic tombs, whether stretched out or in a contracted position, nothing can be proved in this connection. For it is just this contracted position that is the characteristic feature of the Middle Helladic period, and I do not hesitate to call it a Nordic feature<sup>3</sup> — we shall revert to this matter in the Conclusions.

As to the connection of the Mycenae shaft-graves with Middle Helladic tombs, there does not seem to me to be any doubt, especially as Shaft-Grave II at Mycenae is a perfectly complete Middle Helladic cist with only one corpse.<sup>4</sup> And what is more, we have at Asine regular cist-tombs, proved by their burial gifts to belong unquestionably to the Mycenaean period, which differ from the Middle Helladic tombs only in the position of the corpse. As regards the gradual modification of the contracted position to an extended position, I refer the reader to the evidence given above from the Asine tombs.

The pithos-graves at Asine are not quite 6 % of all the Middle Helladic tombs. All of them are children's graves. This type of tomb, too, as is well known, is widely spread: it occurs, both on the Greek mainland, in the Cyclades,<sup>5</sup> and in Crete.<sup>7</sup> In

<sup>1</sup> Cf. *Ἐλευσινιακά*, p. 39.

<sup>2</sup> A similar case from Eleusis, *Ἐλευσινιακά*, p. 43. To consider the possibility, as Blegen and Wace do, of a combination of the cist and pithos types of grave in a case from Zerelia, where a child in a cist-tomb was covered by a pithos fragment, l. c. p. 31, note 3, strikes me as not very plausible. At Asine, a Proto-Geometric tomb was found which was covered in the same way (fig. 117), but at that time pithos burials no longer occurred at Asine.

<sup>3</sup> Cf. Childe, *The Danube in Prehistory*, passim.

<sup>4</sup> This theory has recently been obstinately maintained by Blegen and Wace, l. c., p. 31 ff., against Evans, *Shaft-Graves and Beehive Tombs*, p. 19, who wishes to see in the shaft-graves an innovation which suddenly appears on the Greek mainland.

<sup>5</sup> Examples from Sesklo, Tsountas, *Διήγησις καὶ Σέσκιον*, p. 127, and Wace, Thompson, *Prehistoric Thessaly*, p. 66; from Rakhmani, Wace, Thompson, l. c., p. 41; from Zerelia, Wace, Thompson, l. c., p. 161; from Orchomenos, Bulle, *Orchomenos I*, p. 62; from Eutresis, Goldman, *Eutresis*, p. 221 ff.; from Aphidna, *Ath. Mitt.* XXI, 1896, p. 391 ff.; from Thorikos, *Eph. Arch.*, 1895, p. 234 ff.; from Salamis, *Ath. Mitt.* XXXV, 1910, p. 17 ff.; from Aegina, *Eph. Arch.*, 1895, p. 254; from Korakou, Blegen, *Korakou*, p. 100 ff.; from Tiryns, *Eph. Arch.*, 1898, p. 210; from Leukas, Dörpfeld, *Alt-Ithaka I*, p. 221 f.

<sup>6</sup> Cf. first and foremost Phylakopi, Dawkins, Droop, *BSA*, XVII, p. 6 ff.

<sup>7</sup> Only at Mochlos whose culture was greatly influenced by the Cyclades, Seager, *Explorations in the Island of Mochlos*, p. 88, and in Sphungaras, *Anthrop. Publ. of the Pennsylv. Univ.*, III 2, 1912.

Asia Minor, however, this type of burial is still more common, being at times the only normal type of burial, e. g. at Yortan<sup>1</sup> and Alishar-Hüyük in Strata I and II,<sup>2</sup> which have been provisionally dated from 3500 — to 1750 B. C.<sup>3</sup> From there this peculiar method of burial probably spread to Central Europe, where it occurs, but rarely, in the Aunjetitz culture. In other respects also Anatolian influence must be anticipated and assumed.<sup>4</sup>

Blegen's observation that in the case of some Middle Helladic tombs at the Argive Heraeum, sacrificial gifts had been placed above the tomb itself,<sup>5</sup> finds no direct support at Asine. There may be some connection here with the intense settlement, to which attention has already been drawn, and it seems to me unlikely that this custom will ever be proved in the case of intra-mural graves, but, on the other hand, quite probably may be in the burial places proper. However, the tomb-altars we believe (above, p. 347) to have discovered at Asine speak unhesitatingly and unmistakably in favour of a real burial cult, and I am in complete agreement with Blegen's and Wace's belief that a cult of the dead was practised.

The pithos-grave may perhaps also have a certain importance in this connection. The peculiarity of this type of burial and its wide diffusion throughout the whole of the Near East, in Greece besides other contemporary methods of burial and right up into Central Europe, are witnesses as has already been stated to its common origin.<sup>6</sup> The Chaldaeans also buried their dead in clay urns.<sup>7</sup> Now Herodotos tells us that the Babylonians buried their dead in honey.<sup>8</sup> It is these two statements I would like to combine.

The use of honey in the cult of the dead is generally known, and has often been discussed.<sup>9</sup> Odysseus pours out *μελίχρητον* for the dead (λ 27) and the custom can be traced throughout antiquity, more especially in the incantations to the dead. Honey and milk was food for the souls, and was understood as a Divine food that gave immortality. We find it, in Homer, a link between the honey sacrifices of these later times to the dead, and the method of burial presumed by me to have been employed during the Middle Helladic period.

<sup>1</sup> Acad. des Inscr. et Belles-Lettres, Comptes rendus, 1901, p. 812 ff.

<sup>2</sup> The University of Chicago, Oriental Institute Publications, Vol. XIX, p. 72 ff., p. 181 ff.

<sup>3</sup> Ibid., p. 26.

<sup>4</sup> Cf. Childe, *The Danube in Prehistory*, p. 239 ff.

<sup>5</sup> Blegen, Wace, l. c., p. 33.

<sup>6</sup> I am not unaware of the fact that similar Urn-burials have occurred in some parts of America, and that some Indian tribes in South America even now practise this method of interment: cf. Eric von Rosen, *Popular Account of Archaeological Research during the Swedish Chaco-Cordillera-Expedition 1901-1902*, p. 2 and fig. 4; C. B. Moore, *Aboriginal Urn-burial in the United States*, *American Anthropologist*, VI, p. 660 ff. In America, too, the custom probably spread from one centre.

<sup>7</sup> Cf. e. g. Perrot-Chipiez, *Histoire de l'Art* II, p. 371.

<sup>8</sup> Herodotos I. 198: *παρά δέ σφι ἐν μέλιτι*. Honey was used for embalming; thus Alexander the Great was embalmed by the method as his Asiatic predecessors according to Statius, *Silv.* III, 2, 18; Curtius, *Alex.* X. 10.

<sup>9</sup> Cf. Usener, *Milch und Honig*, *Rhein. Mus.*, 1902, p. 193 (*Kl. Schriften*, IV, p. 398 ff., espec. 403) and Stengel, *Opferbräuche der Griechen*, p. 183 ff.



At the funeral of Patroclus, among other things jars of honey were placed on the funeral pyre:

Il. XXIII, 170: ἐν δ' ἐτίθει μέλιτος καὶ ἀλείφατος ἀμφιφορῆας. A similar procedure is to be found in the relation of Achilles' funeral in *νέχυντα δευτέρω*.

Od. XXIV, 68 ff.: *Καίεο δ' ἐν τ' ἐσθῆτι θεῶν καὶ ἀλείφατι πολλῶ καὶ μέλιτι γλυκερῶ . . .* Helbig comments this custom of surrounding the dead on their funeral pyre with vessels filled with honey, as »höchst merkwürdig».<sup>1</sup> He points out that there can hardly have been any practical reasons, since, in fact, honey can by no means have hastened the cremation of the corpse, as fatty substances undoubtedly did. Helbig raises the question whether the custom cannot be explained by the supposition that in pre-Homeric days the honey played a prominent part.<sup>2</sup> I am convinced that this was the case. It is just for the Middle Helladic intra-mural burials, when the dead came to be placed in an earth-grave immediately below the floor or the dead child in a pithos, which was then buried a little below the floor, or when the dead was buried inside the house in a cist, the cover-slabs of which lay only a few inches below the floor or, in one case on a level with it (cf. above, Tomb 4), that the use of some simple embalming process for the dead must be assumed. For this honey was the simple and obvious antiseptic, produced by Nature herself, ready to hand. The wax present in the honey excludes the air, while the sugar extracts the moisture from the body tissues and dries it.

The only evidence found of embalming in prehistoric times in Greece, is the head of a skeleton discovered in Schliemann's Grave I at Mycenae.<sup>3</sup> A proof that the dead were subjected to some kind of preparation Helbig also finds in the fact that the word *ταρχύειν* is used in three places in the Iliad with the meaning »bury», the later linguistic form *ταριχεύειν* means »preserve, dry, embalm». From one passage in Herodotos it is also seen that the ancients imagined the corpses of the heroes as *τάρχοι- mummies*.<sup>4</sup> And the exposure of Hector's corpse on a »lit de parade» for nine days, that of Achilles for seventeen, is, of course, evidence in favour of preparation or conservation, as is also the treatment which Thetis causes Patroclus' corpse to undergo for the purpose of preserving it — she injects nectar and ambrosia through his nostrils. This by no means gives an impression of poetic fiction, as Helbig justly states, but with certainty relates to some actual procedure.

If we assume some such preservation of the dead with honey, the burial of a child in a jar of honey becomes easily comprehensible — in Egypt, too, pithos-burial was common, and there a certain degree of mummification must be assumed.<sup>5</sup> It is to just

<sup>1</sup> Helbig, *Das Homerische Epos*, p. 43.

<sup>2</sup> Helbig, l. c.: »Es fragt sich somit, ob jene Sitte nicht daraus zu erklären ist, dass der Honig bei der während der vorhomerischen Epoche üblichen Beisetzung eine hervorragende Bedeutung gehabt hatte».

<sup>3</sup> Schliemann, *Mykenä*, p. 340 and fig. 454. — Cf. Helbig's statement about this, l. c., p. 41 f.

<sup>4</sup> Herodotos IX, 120.

<sup>5</sup> Cf. e. g. University of California, *Egyptian Archaeology*, Vol. VI: Reisner, Naga-ed-Dêr, III, p. 11 ff.

such a pithos-burial, in my opinion, that the story of Glaucus, son of Minos, alludes. As a boy he once pursued a mouse and happened to fall into a pithos with honey, and died.<sup>1</sup> That he was found after a good deal of trouble and recalled to life, has nothing to do with the point. It has already been pointed out by Preller that to fall into a pithos with honey was a periphrasis for to die, and that the expression must have some connection with a custom of burying the dead in honey.<sup>2</sup> I would like to define Preller's interpretation more exactly so that the expression points directly to pithos-burial in honey. Since after the end of the Middle Helladic period pithos-burial in the Greek cultural area only occurs sporadically at the Dipylon and on the outskirts of the Greek world<sup>3</sup>, it is possible that we have here fresh evidence of the fact that a good deal in the ancient myths and legends is of Mycenaean, or even pre-Mycenaean, origin.

It is not until we have a clear understanding of this preservative quality of honey, that we can properly understand the power of the honey-like nectar to give eternal life, and the significance of honey in the later cult of the dead. Behind this method of burial, there is, of course concealed, a belief in a life after death, the same faith that finds expression in sacrifices to the dead.

As regards the contracted position in the larger types of tombs, it should be noted that the skeletons in no case show any traces of burning — and this statement is made in consideration of Dörpfeld's well-known attempts to explain the contracted position by the assumption that a slight cremation took place which in itself would have been sufficient explanation.<sup>4</sup>

Tsountas, in referring to the position of the arms, already long ago rejected this hypothesis.<sup>5</sup> He points out that in the Cyclades one arm was always bent, so that one hand lay either over the face or under the head as a support, the other either bent in the same way or in such a way that the hand rested on the knees or on the shins.<sup>6</sup> The same seems to have been generally the case at Dimini and Sesklo.<sup>7</sup> Tsountas sees in the contracted position only an attempt to place the dead *οἶον ἐν κοιμώμενοι*. I am convinced of the correctness of this interpretation, and all the more so since I have many a time noticed, during the work of excavation, that this is the natural sleeping posture for a person who is resting on the bare ground.<sup>8</sup>

<sup>1</sup> Apollodoros III, 3, 1: *Γλαῦκος δὲ, ἔτι νήπιος ὑπάρχων, μὲν διώκων εἰς μέλιτος πίθος πεσὼν ἀπέθανεν*. Cf. also Hyginus, Fab. 136.

<sup>2</sup> Preller, *Griechische Mythologie* II<sup>3</sup>, 475: «ein Ausdruck für einen frühen Tod, bei dem das Bild von Honigfass der im Orient nicht ungewöhnlichen Sitte die Verstorbenen in Honig beizusetzen entlehnt ist».

<sup>3</sup> Dipylon tombs of this kind in Brückner and Pernice, *Ath. Mitt.* XVIII, 1893, p. 118 f., 135 f., on Amorgos, Tsountas, *Eph. Arch.*, 1896, p. 208 ff., on Rhodes, Kinch, *Vroulia*, p. 35 ff.

<sup>4</sup> Cf. *Comptes rendus du Congrès International d'Archéologie*. Athènes 1905, p. 163.

<sup>5</sup> Tsountas, *Λεγύμει καὶ Σέσκλον*, p. 128 ff.

<sup>6</sup> Cf. *Eph. Arch.*, 1899, p. 84.

<sup>7</sup> Cf. Tsountas, *Λεγύμει καὶ Σέσκλον*, p. 128 ff.

<sup>8</sup> Contracted tombs have also been found in such widely different places as at Oldoway, in German East Africa, in Egypt in Europe. Cf. Hans Reck, *Oldoway*, 1933, and in the older literature especially R. Forrer, *Über Steinzeit, Hockergräber zu Achmim, Nagada, etc. in Ober-Ägypten und über europäische Parallelfunde*, 1901.

As regards the position of the arms and hands, a certain difference seems to prevail between the tombs in the Cyclades and Thessaly, on the one hand, and the Asine, tombs, on the other. As may be seen from the synopsis on p. 342 the position described by Tsountas is also represented at Asine — besides, I would rather believe that the arrangement of one hand, which Tsountas describes as *τεταμμένη πρὸς τὰ γόνατα ἢ καθεμένη πρὸς τὰς χυήμας* is the same as has above been described as placing over or in front of the pudenda.

The position of the arms most customary at Asine is the pudica-position, which also seems to me to give an insight into the mentality of Middle Helladic man. There exists a deeply rooted superstition that the organs which are of the greatest importance for the propagation of the genus, and its first nourishment are especially exposed to the attacks of evil powers, likewise the largest openings of the body, especially the head. The golden masks found in the Mycenaean Shaft-Graves, and also the later mouth- and eye-plates, placed over the face of the dead, seem to me to be capable of satisfactory explanation only in this way. As to the pudica-position, it is especially worth noting that it is exactly the same position later found in Art, and which is there often misunderstood as a manner of emphasizing the organs most important for birth and nourishment.<sup>1</sup>

The opinion has been expressed that in Art it had an Oriental origin, and dated back to the well-known type of figure which presses one breast with the left hand and lays the right hand on the abdomen, and that this position had, via Cyprus, reached Greece, where it had been re-interpreted.<sup>2</sup> I would like to emphasize the great antiquity of the position in Greece, which has been fully confirmed not only by the Asine tombs but also by Middle Helladic tombs from other quarters; compare for example the tombs in Wace's Excavations at Mycenae, p. 76, and chiefly fig. 17 b.<sup>3</sup> It is also worth while pointing out that amongst the clothed Late Mycenaean idols there is a type, represented for example in Chamber-tomb I at Dendra, with one hand on the breast and the other on the abdomen.<sup>4</sup>

Concerning the position with one hand held against the face, the other on the breast, which also occurs, it should be remarked that this, too, appears in creative Art. It probably represents a mourning position par préférence, already found in Minoan-Mycenaean art, e. g. »La pleureuse» from L. M. I, in Berlin, and later so extremely common, e. g. on Dipylon-vases and white-ground lekythoi. One hand before the face, the other along the side, is the typical position of adoration, and is also often depicted in Minoan-Mycenaean creative art, e. g. the worshipper from Tylissos. It is the feelings that take hold of the living face to face with the mysterious terror

<sup>1</sup> Thus already E. Curtius, *Nuove menotie dell' Instituto*, 1865, p. 373 ff.

<sup>2</sup> Cf. Blinkenberg, *Knidia*, p. 205 ff.

<sup>3</sup> BSA, XXV, 1921—1923.

<sup>4</sup> Cf. Persson, *The Royal Tombs at Dendra*, p. 83 f.



beyond the grave, which in my opinion, we are justified in interpreting from the position of the arms of the skeletons, a »Gebärdesprache» that has something to tell us about the mentality of Middle Helladic man.

Finally, a few words about the skeleton in Tomb 29. The upper part of the body — the trunk — is laid on its back, with the arms strongly bent and both hands placed on the breast, below two rather large stones, which had obviously been placed there quite intentionally, because the cist was properly closed with three large covering slabs. This circumstance can scarcely be otherwise interpreted than as an attempt to »bind» the dead, to increase the weight of the earth above a dangerous person, an actual *ἀνάρθεμα*.<sup>1</sup> It was probably a very formidable man who here found his last resting place — I would recall the arrangements for burial cult that had been made over the same tomb.

## L A T E H E L L A D I C T O M B S

Alongside the tombs characteristic of the Mycenaean period, tholoi and chamber-tombs, there are also other types of tombs which nevertheless have been put in the shade to such a degree, that in ordinary cases they are not taken into account, namely the earth-cut and cist-graves. And still they are of great importance as they bear clear witness of the continuity from the previous period, the Middle Helladic. It is the origin not only of the tholos, but to an equal extent that of the chamber-tomb, which is the great problem, and in my opinion we have hitherto included the latter unduly little in the discussion. Nevertheless, this question must be left aside. Here is now first rendered a survey of the simpler Mycenaean tombs from Asine.

### A. E A R T H - C U T

Altogether nine graves of this type have been met with, cf. p. 128. All had been single graves and did not contain any finds (Tombs L. H. 1—9).

To this group of earth-cut graves belong also tombs which were found in dromoi of Mycenaean chamber-tombs (cf. Chamber-tombs I: 1 and II: 1).

### B. C I S T - T O M B S

These tombs are three in number (Tombs L. H. 11—13). It was only in two of them (Nos. 11 and 13) the following finds (fig. 232: 1—3) were made.

Tomb L. H. 11: —

1. Straight-sided cup. H. 0.068 m, d. of mouth 0.085 m. Almost cylindrical body, with slightly concave sides and a flat loop handle set horizontally half-way down the body. Yellow surface; red varnish. The body is divided in the middle by a thin plastic band. The whole cup is painted red.

<sup>1</sup> Cf. Keramopoulos, *Ὁ ἀποταφισμὸς*, p. 52 ff., with an excellent discussion of relevant literature.

2. Side-spouted jar with basket handle. H. with handle 0.13 m, d. 0.075 m. Globular body with a low, flat foot, narrow neck, a flat loop handle arched across the splayed mouth, and a narrow, tubular spout slanting upwards from the shoulder. Yellow clay, lustrous black varnish. Entirely covered with paint.

3. Side-spouted jar with basket handle. H. with handle 0.122 m, d. 0.65 m. Shape, clay, and varnish as last.

The position in the tomb of one of these side-spouted jars quite close to the head lends support to the old idea that these vases served as feeding-bottles. We also have, however, larger specimens of the same type for which such use is out of the question. This type of vase is of interest because in spite of its singular shape it persisted in use



Fig. 232. Pottery from Tomb L. H. 11.

from Early Helladic<sup>1</sup> to Mycenaean times; in its now fully developed shape it is characteristic of the Late Helladic III period.

In Tomb L. H. 13 were found:

Jug. H. 0.09 m, d. 0.07 m. Elongated, globular shape with flattened base and a flat loop handle from shoulder to lip. Coarse, brownish clay; blackened by fire.

Steatite button, h. 0.05 m, d. 0.028 m. Ordinary conical shape, roughly made.

The simple type of single tombs, poor in finds, gave us an insight into quite another side of Mycenaean burial customs than the often magnificent and richly furnished chamber-tombs, in which as a rule several skeletons are found. The chamber-tombs were family tombs, intended for fairly well-to-do people. Poor people certainly often had to be satisfied with only a covering of earth over their bones, as our earth-cut tomb No. 2 shows.

Another thing worth mentioning, but which, as far as I know, has never been pointed out, is that children's skeletons are very rarely found in chamber-tombs, at any rate no traces of infants. This may be due to the total decomposition of children's skeletons — for they were found in other types of tombs, both from Middle and Early Helladic times. In my opinion we have the explanation of this fact in tombs of just the kind which have been described — the majority are children's tombs.

<sup>1</sup> Cf. Forsdyke, in B. M. Catalogue I, 1, p. 170.

The excavations at Asine have shown clearly that the dromoi of the chamber-tombs were filled in again after each burial. Of course, to re-open them entailed a good deal of trouble, and, therefore, the relations of the dead were occasionally content with only removing as much of the rubble packing in the doorway as was unavoidably necessary to gain access to the chamber. By careful excavation by strata in the dromoi we have also been enabled to state definitely that in secondary burials they were content to dig down obliquely into the dromos, in front of the door — the best example of this is seen in Chamber-tomb I: 2. In other cases we must presume that no more labour was expended than was needed simply to place a dead member of the family in the filling of the dromos, in either a cist or coffin (e. g. in Dromos 2 of Chamber-tomb I: 1), or in an earth-cut grave, near the door (e. g. in Dromos 1 of Chamber-tomb I: 1; in dromos of Chamber-tomb II: 1), which explains these »door-keepers», who, consequently, must not be looked upon as sacrificed slaves, as has previously been suggested. Most of all no trouble was taken to bury dead infants in the chamber-tombs — they had to be satisfied with a simple stone cist, or even simply with a hole in the ground.

### C. CHAMBER-TOMBS

The Mycenaean chamber-tombs are distributed in two necropoles (p. 147). In the southern one, Necropolis I, nearest the town, on the eastern slope of Mt Barbouna, 7 tombs have been investigated; in the northern one, Necropolis II, situated on the north-eastern slope of the hill, so far only one tomb has been excavated. This is certainly later than the others, but it is too early to express any opinion about the relative age of the two necropoles, whether they are contemporary and belong to different clans or townships,<sup>1</sup> or whether they may perhaps have been used successively. In the southern necropolis the tombs investigated nearest the town are, as far as can be seen, of an earlier type of construction than those situated farther away.

All the tombs lie along the slope of the hill, as is quite natural. The Asine results do not permit us, at least so far, to draw any conclusions as to the age of the tombs from the length of the dromos, as Wace wanted to do.<sup>2</sup> Of course, the abnormal tomb I: 1, with its two dromoi, seems to give examples of Wace's two types, one short and broad with vaulted sides, one long and narrow with straight sides, and the arrangement in the chamber appears in this case clearly to prove that the short, vaulted dromos is later than the long, narrow one. But I am unable to find any other explanation of this fact than the one I have given in *Rap. pré.*, p. 80. During L. H. II probably the tomb was cut out of the rock, and the most northerly of the two dromoi, which in this case was cut down obliquely into the slope of the rock.

<sup>1</sup> Cf. the conditions at Mycenae, Wace, *Chamber Tombs at Mycenae*, p. 121 ff.

<sup>2</sup> Cf. Wace, *l. c.*, p. 124 f. — Even in the case of the vaulted tombs Wace's attempt to find in the length of the dromos criterion for dating should for the present be accepted with reservations. The vaulted tombs at Berbati, which we excavated in the summer of 1935, and which must be dated to the 14th century B. C., have very short dromoi.



After the burial the dromos was filled in — in the filling was found a cist-tomb from the Mycenaean epoch, quite close to the surface, cf. p. 158 — and the tomb was altogether forgotten. Some centuries later somebody wanted to cut a fresh rock-tomb. There is nothing in the vicinity to suggest the presence of a tomb, and the southern dromos was then made. This dromos was carried so near the chamber, which belonged to the northern dromos, that on the left side only a rock-wall a few cm thick remained for the doorway. Once the old tomb-chamber was entered, it was widened out — the surface of the floor made at this time, lies about 30 cm higher than the original one. In order to find room, two ossuaries were cut in the northern wall of the old chamber so as to take the bones from the last burial in the old tomb. A decisive proof of the correctness of this explanation lies in the fact that a stone bench was erected in front of the stone filling of the northern dromos inside the tomb.

Tomb I: 2, too, with its long and comparatively narrow dromos, with the straight sides sloping sharply inwards towards the top, was, to judge from the finds, already in use towards the end of L. H. II. It should also be mentioned that Tomb II: 1, which according to the finds belongs to the end of L. H. III, has an uncommonly short and wide dromos, with three steps roughly hewn in the rock floor at the beginning of the dromos. It seems therefore that the appearance of the dromos, at least at Asine, was produced solely by the nature of the slope.

In the same way, at Asine the width of the doorway appears to give no criterion for dating, as can be most clearly seen from a comparison between the tombs I:1 and I:2.

From the blocking wall before the doorway, outside, with a stone barrier across the whole dromos, traces at Asine survive in Tomb I: 2, and probably also in other places — the same peculiarity was encountered by us in the vaulted tomb at Dendra,<sup>1</sup> that the dromos was filled in after a burial was made and occasionally only partly opened to admit a fresh burial is clearly shown by the careful observations from Tomb I: 2. Corresponding observations have also been made in other tombs.

In Tombs I: 3 and I: 4 burial niches were discovered in the dromoi.<sup>2</sup> Both these tombs had never been used; Tomb I: 4 lacks a chamber altogether owing to the fact that the hard limestone rock suddenly put an obstacle in the way; the chamber of Tomb I: 3 produced no finds at all, probably because the entrance had already become damaged during the Mycenaean period. We have thus so far no tomb niches at Asine, which might be compared with those at Mycenae. The small niche in the wall of the dromos of Tomb I:5, where a closed vase find from the very last years of L. H. III was discovered once contained a sacrifice, as the bones in the large hydria showed, and is therefore not comparable with the children's tombs in dromoi discovered elsewhere.

Distinct traces of the cleaning up of the chamber on the occasion of a fresh burial appear in the filling of all the dromoi; bones, minor finds, and sherds, which belong

<sup>1</sup> Cf. Persson, *The Royal Tombs at Dendra*, p. 11 f.; Wace, *l. c.*, p. 127.

<sup>2</sup> Cf. Wace, *l. c.*, p. 128 f.

to vases found in the chamber. On the other hand, burial sacrifices were made to the dead in the dromos, before it was quite filled in. In practically all the dromos fills broken goblets have been found, which had nothing to do with the original contents of the chamber.

The rubble packing in the doorway is usually found *in situ*. The so-called plunderings which have often been supposed to have taken place were certainly done by the members of the families themselves on the occasions of later burials. In such secondary burials they contented themselves with merely making an opening in the filling large enough to admit of the dead being taken into the chamber; it is often possible to assemble different burial groups even from the rubble packing in the doorway. As a result of the clearance both sherds and small finds often found their way into the stomion, but no objects could be definitely stated to have been purposely deposited there.

The dromos, as a rule, joins the tomb-chamber on one broad side; the latter is usually a more or less irregular oval. It is only in Tomb I: 2 that we have quite a regular chamber cut in the form of a house with a gable roof. It has often been noticed that the ceiling in Mycenaean tombs »affecte la forme d'un toit penché»<sup>1</sup> but this construction is in no place so well preserved as in our tomb. It is obvious that the shape of the tomb imitates the form of a Mycenaean room, and this supplies fresh evidence that the megaron has had a gable roof.

In Tomb I: 1 were found two skeletons on benches constructed in the chamber, one of natural stone, the other built of sun-dried bricks. Two of the tombs, I: 2 and and I: 5, show pits, both intended for burial — similar ones occur, as is well known, in various tombs at Mycenae, at Argos, and in many other places.<sup>2</sup>

No burial in strata, such as was found in some tombs at Mycenae,<sup>3</sup> could be ascertained at Asine. On the other hand, vases often lay in bigger or smaller groups belonging to separate burials, as may be seen especially clearly in Tomb I: 7.

On the occasion of a fresh burial a clearance was made, and the tomb was purified by fire. The thick layers of charcoal and the layers of ash near the door, which occur in the majority of Mycenaean tombs, I have explained in this way<sup>4</sup> in *Rap. prél.*, p. 81 f.

As regards ceremonial of a Mycenaean burial reference may be made to Wace's attempts at reconstruction in *The Chamber Tombs at Mycenae*, p. 143 ff. No traces of sacrifice appeared in our chamber-tombs at Asine. In Tomb I: 1 was found, close to the latest skeleton, on the bench in the middle of the chamber, the well-preserved head of a dog, which I have interpreted as a sacrifice *pars pro toto*, cf. *Aperçu provisoire*, p. 35. We have a perfect parallel for this from the vaulted tomb at Dendra.<sup>5</sup>

<sup>1</sup> Cf. e. g. Vollgraff, *Fouilles d'Argos*, BCH XXVIII, 1904, p. 372.

<sup>2</sup> Cf. Wace, l. c., p. Vollgraff, l. c., p. 372 f.

<sup>3</sup> Cf. Wace, l. c., p. 139.

<sup>4</sup> Cf. now also Persson, *The Royal Tombs at Dendra*, p. 70; Wace, l. c., p. 144.

<sup>5</sup> Cf. Persson, *The Royal Tombs at Dendra*, p. 18; in a Mycenaean chamber-tomb at Nauplia was found the whole skeleton of a horse.

## CHAMBER-TOMB I: 1

*Pottery*

1. Three-handled jar (fig. 233: 1). H. 0.425 m, d. 0.33 m. Swelling shape with spreading roll foot. The neck is high, the rim wide and projecting; the handles are ribbed. Greenish-yellow slip on brownish-red clay; reddish-black varnish. On the shoulder, in a wide band between each pair of handles, is a conventional figure of a large, lily-like flower with broad petals and stamens. At the bottom of the stalk from which it rises, roots are conventionally represented in three strands, carried upwards in graceful curves on each side of the flower. (This motive is well-known from Ephyraean ware and already appears on matt-painted pottery, cf. Blegen, *Zygouries*, fig. 127: 2.) Below the shoulder is a group of three bands, below the neck a ring of colour. Foot, neck, and handles are painted.

2. Round-bodied spherical amphora (fig. 233: 2); the neck is missing. H. 0.42 m, d. 0.45 m. The body is a slightly flattened sphere with a small ring foot and plain, upright collar at the mouth, which is narrow. There are two loop handles, set horizontally on the widest part of the shoulder; these are pierced horizontally at the point of insection. Red clay with thin, greyish slip; decoration in metallic, reddish-black varnish. On a level with the handles is a broad panel enclosing on either side two pairs of large loops, probably strongly conventionalized octopuses. On the shoulder, a broad, plain band encircled below and above by groups of three lines, below the handle-zone two more lines. Lip and handles painted.

3. Round-bodied spherical amphora (fig. 233: 3). H. 0.46 m, d. 0.50 m. Shape as last. Clay and varnish as last. In the handle-zone, on either side, four large running spirals, on the shoulder smaller running spirals; on the shoulder, between the handles, a pair of pierced bosses as eyes of spirals. The shoulder-band is encircled by groups of three bands, below the handle-zone three more bands. Lip and handles painted.

4. Amphora (fig. 233: 4). H. 0.175 m, d. 0.165 m. The body is almost globular, and has a ring foot, high neck, and out-curved lip. On the shoulder are two small, horizontal loop handles, round in section, slanting outwards. The fabric is very good. Yellow clay with thin brownish varnish. The entire body and the neck are covered with fan-like groups of short bent lines around one octopus on either side with arms opening upwards in the form of a crescent, these arms being marked by dots to indicate suction cups on the lower side. Apparently, the bent lines represent waves. The foot is black; the handles have bars; the lip is edged with black. On the inside of the lip are two pairs of alternating bands of zig-zags and plain lines.

5. Stirrup-vase (fig. 233: 5). H. 0.25 m, d. 0.22 m. Roughly globular shape pointed below and flattened above the shoulder, with ring foot. The top of the false neck is a large disc with slightly raised centre. Yellow clay with brownish varnish. Within the handle-ring are five lattice triangles. The body is encircled by differently decorated





Fig. 233. Pottery from Chamber-tomb I: 1.





8 7 5 6 9 10  
18 21 13 20 15 19 12 17 14 16 11 22

Fig. 234. Pottery from Chamber-tomb I: 1.



40 48 43 39 41  
50 57 56 58  
44 51 52 42 53 45  
49 47 54 55 46

Fig. 235. Pottery from Chamber-tomb I: 1.

bands; beginning from above, two small bands with zig-zags, a broader one with parallel chevrons set on end («Fischgräten»), herring-bone pattern, then a band with small circles, another band of herring-bone pattern, then two rows of concentric semicircles, the upper one with the circles upwards or downwards, the lower one only downwards, and, finally, a broad, plain band. A loop connects the bases of the false neck and spout; on top of the false neck is a spiral coil with a plain eye. The handles have vertical bands.

6. Stirrup-vase. H. 0.205 m, d. 0.17 m. Shape as last but centre of disc above the false neck more raised. Clay and varnish like last. Within the handle area are five groups of concentric semicircles, each composed of six lines, the outermost being dotted. The body is encircled by broad and narrow lines, the foot is painted. A loop connects the bases of the false neck and spout; on top of the false neck is a spiral.

7. Stirrup-vase (fig. 236: 1). H. 0.165 m, d. 0.115 m. Tall, oval body, the lower part of it elongated, curving inwards from the rounded shoulder to a narrow foot with splayed rim. The spout tapers and on top of the false neck is a sunk disc. Reddish clay with red varnish. The handle area is decorated with lattice-pattern, the body is encircled by lines. Foot, spout, and handles painted. There are concentric circles on the top of the false neck.

8. Stirrup-vase. H. 0.15 m, d. 0.135 m. Shape as No. 6, but more flattened, disc of false neck more raised. Coarse, yellow clay and brownish-black varnish. Within the handle area five groups of concentric semicircles, each one composed of five or six lines, the outermost being dotted on the outside. The body is encircled by broad and narrow lines; the foot is painted, the handles are barred. A loop connects the bases of the false neck and spout; on the top of the false neck is a spiral.

9. Stirrup-vase. H. 0.14 m, d. 0.12 m. Shape as No. 6. Greenish-yellow clay, black varnish which has mostly worn off. Within the handle area four groups of four semicircles each. Banded body, painted foot, handles with crossed lines, bases of false neck and spout connected by a loop, on top of the false neck a spiral.

10. Stirrup-vase (fig. 236: 2). H. 0.14 m, d. 0.12 m. Shape as last. Yellow clay, brownish-black varnish. Within the handle area, opposite the spout, two cross-hatched triangles, between them, from the border to the false neck, a row of increasing parallel dashes. On each side of the spout, groups of parallel, high loops with a row of dots on the outer line, two pairs of loops connected by dashes. The shoulder has a zig-zag band, the body is encircled by broad and narrow lines. A loop connects the base of the false neck and spout; on the top of the raised neck is a spiral.

11. Stirrup-vase. H. 0.135 m, d. 0.12 m. Shape as last but body more flattened and the false neck quite flat on top. Yellow clay; brownish-black varnish. No decoration within the shoulder area; the body is encircled with lines; a loop connects the base of the false neck and spout; there is a spiral on top of the false neck.

12. Stirrup-vase (fig. 236: 3). H. 0.13 m, d. 0.105 m. Shape as No. 10. Greenish-

yellow surface; good, black varnish. Within the handle area, opposite the spout, two triangles with parallel strokes and concentric curves at the lateral angles. On each side of the spout a group of parallel, curved lines. Below this decoration and on the broadest part of the body are bands with zig-zags. The rest of the body ornamented with broad and narrow bands. A loop round the base of the false neck and spout; on top of the false neck a spiral.

13. Stirrup-vase. H. 0.13 m, d. 0.105 m. Shape as No. 6. Greenish-yellow clay; blackish-brown varnish, mostly worn off. Within the handle area four groups of parallel loops with a row of dots at the outer edge. The body is encircled by broad and narrow bands, the handles are barred. A loop round the bases of the false neck and spout; on top of the false neck a spiral.

14. Stirrup-vase. H. 0.125 m, d. 0.11 m. Shape, clay, and varnish as last. Within the handle area, opposite the spout, are two groups of framed triangles, the outermost line being dotted; between the inner lines the space is filled in with colour, except two small groups of loops at the base. On each side of the spout two groups of parallel loops. The body is encircled by broad and narrow bands; a loop round the basis of the false neck and spout; on top of the false neck a spiral.

15. Stirrup-vase. H. 0.125 m, d. 0.105 m. Shape as last. Brownish-yellow clay; brownish-black varnish. Within the handle area four groups of parallel loops. The body is encircled, the handles barred; on top of the false neck a spiral.

16. Stirrup-vase. H. 0.125 m, d. 0.11 m. Shape, clay, and varnish as last. Within the handle area, opposite the spout, a cross-hatched lozenge with concave sides; on each side of the spout groups of parallel loops with incurved sides; on each side of the spout groups of parallel loops with a row of dots at the outer edge. The body is encircled with bands; the handles have crossed lines. A loop connects the base of the false neck and spout; on top of the false neck a spiral.

17. Stirrup-vase. H. 0.125 m, d. 0.10 m. Shape and clay as last; reddish varnish. Within the handle area cross-hatched triangles. The body is banded, the handles are barred. A loop round the base of the false neck and spout; on top of the false neck a spiral.

18. Stirrup-vase. H. 0.12 m, d. 0.10 m. Globular body on high ring foot; unusually high, raised centre of disc above the false neck. Greyish-yellow clay, black varnish, mostly worn off. Within the handle area groups of intersecting lozenges, the innermost entirely filled. The body is banded; the handles are barred. A spiral on the top of the false neck.

19. Stirrup-vase (fig. 236: 4). H. 0.11 m, d. 0.095 m. Shape as No. 11. Reddish-yellow clay; good, red varnish. Within the handle area, opposite the spout, a highly conventionalized lily with spiral petals and groups of repeated triangles, the innermost filled in, at the edge of the shoulder a zig-zag. On each side of the spout similar groups of triangles. The body has broad and narrow bands. The foot is painted;



the spout is edged with varnish. A loop connects the bases of the false neck and the spout. The handles are decorated with chevrons whose apices are pointed downwards. The centre of the disc above the false neck has a plain circle within which are four groups of repeated triangles with their points to the centre. The spout has a band round the middle.

20. Stirrup-vase. H. 0.105 m, d. 0.09 m. Shape as last. Yellow clay; reddish varnish. Within the handle area cross-hatched triangles. The body is encircled; a loop connects the bases of the false neck and spout. The spout is edged with paint; a spiral on top of the false neck.

21. Stirrup-vase (fig. 236: 5). H. 0.07 m, d. 0.10 m. Very squat, globular body with flattened foot. Reddish-yellow clay; brilliant, brownish-red varnish. Within the handle area groups of curved lines radiating from the base of the false neck. The body is encircled by broad and narrow lines. The foot is painted; the spout, the handles, and the disc of the false neck are edged with paint. On top of the false neck is a plain circle.

22. Stirrup-vase. H. 0.07 m, d. 0.08 m. Shape as last. Yellow clay; brownish-black varnish. Within the shoulder area chevrons. The body is encircled. The bases of the spout and false neck have each a separate band. The handles have crossed lines; on top of the false neck is a spiral.

23. Three-handled jug (fig. 236: 6). H. 0.16 m, d. 0.115 m. Flattened, globular body, narrow neck with raised ring at the base, beak-spout tapering upwards; three flat loop handles curving from the back and sides of the spout to the top of the shoulder; low ring foot. Greenish-yellow clay; good, red varnish. In the handle-zone is a series of conventionalized flowers, growing to the right. The body is encircled with thick and thin bands; the neck has three broad bands. The handles and foot are black; the spout is edged with paint.

24. Two-handled jug (fig. 236: 7). H. 0.20 m, d. 0.11 m. Pear-shaped body; high neck with raised ring at base; beak-spout slightly tapering upwards; two round handles, curving from the sides of the mouth to the top of the shoulder. Light-reddish clay with smooth, pale yellow slip; undecorated.

25. Squat bowl (fig. 236: 8). H. 0.08 m, d. 0.21 m. Flat, globular shape with rounded shoulder, low mouth with flat, projecting rim, three small loop handles. Smooth, yellow slip; red varnish. On the lower part of the body is a broad, plain band whose upper edge, on the shoulder, is painted in deep waves, to represent the bed of the sea. In the spaces between the handles the waves are higher and connected by a thin line with a pear-shaped pendant hanging from above, and tapering downwards. Two plain bands below the design, one above. The mouth and handles are painted. On the base are two concentric circles and four groups of two wavy lines radiating outwards.

26. Squat bowl (fig. 236: 9). H. 0.07 m, d. 0.25 m. Shape as last but body more pronouncedly flattened. Smooth, yellow slip, reddish-brown varnish. Decoration as



Fig. 236. Pottery from Chamber-tomb I: 1.





Fig. 237. Pottery from Chamber-tomb I: 1.

last but the upper edge of the solid wave has a dotted line. Mouth, handles, and base painted like last.

27. Three-handled jar (fig. 237). H. 0.16 m, d. 0.14 m. The shoulder has a globular shape and the body narrows sharply in a hollow curve to the spreading foot. Wide, short neck with projecting rim, three small horizontal loop handles. Greenish-yellow clay; black varnish, mostly worn off. In the shoulder-zone, which is of the same width as the handles, parallel, vertical strokes. The body is encircled by broad bands. Handles and neck painted.

28. Amphoriskos (fig. 237). H. 0.08 m, d. 0.085 m. Somewhat flattened, globular body with ring foot, high neck and out-turned lip; on the broadest part of the body two small loop handles round in section set horizontally, but slanting upwards. Pale yellow clay; black varnish. In the handle-band fan-shaped groups of short, wavy lines (cf. above No. 4). The spaces above and below have broad and narrow plain bands. The handles are dashed; the neck is painted black inside and out; the foot is unpainted.

29. Amphoriskos (fig. 238). H. 0.17 m, d. 0.14 m. Shape as last but more globular. Coarse, yellow clay; dull, blackish-brown varnish. In the handle-band a wavy line; shoulder and body encircled; handles barred. The neck is painted black inside and out; the foot is unpainted.

30. Jug (fig. 238). H. 0.17 m, d. 0.13 m. Globular body with ring foot, cylindrical neck with pinched-out spout (almost a trefoil lip) and flattened loop handle from the back of the rim to the shoulder. Coarse, yellow clay; dull, blackish-brown varnish. Decoration of the shoulder vanished, the body encircled. There are bars on the handle.



31. Jug (fig. 238). H. 0.145 m, d. 0.115 m. Shape as last but with flattened shoulder. Coarse, pale-yellow clay; dull, reddish-brown varnish. On the shoulder is a wavy line. The body has broad and narrow bands; there is a narrow band below the neck. The handle has a vertical wavy line; the mouth is edged with paint.

32. Jug (fig. 237). H. 0.10 m, 0.08 m. Flattened, globular body with ring foot, long, narrow neck and flattened, vertical loop handle from the shoulder, joining the neck below the round, turned-out mouth. Paleyellow clay; brownish-black varnish. On the shoulder are six arcs opening downwards. On the body, a broad, plain band and some narrow ones. The handle has bars; the lip is black.

33. Jug (fig. 237). H. 0.085 m, d. 0.065 m. Shape as last but more globular. The shoulder is undecorated; the body has a broad, plain band. The bases of the neck and foot are encircled. The handle and the mouth are edged with paint.

34. Side-spouted jug with basket handle (fig. 237). H. 0.11 m, d. 0.075 m. Globular body; narrow neck with flat loop handle arched over the splayed mouth; narrow, tubular spout slanting upwards from the shoulder. Yellow clay; reddish-brown varnish. At the lower edge of the shoulder-zone groups of concentric semicircles with solid centre. On body a large, plain band and some narrow ones. Below the neck are three narrow bands. The handle is barred; the spout has strokes running lengthwise.

35. Open bowl (fig. 237). H. 0.09 m, d. 0.08 m. Tall bell-shaped globular body with upright sides, the rim splayed slightly outwards. Hollow, conical foot and two round loop handles, whose bases are set horizontally just above the curve of the body, the loops slanting upwards. On a level with the handle in a reserved belt, a zig-zag between two narrow lines, the rest of body, both inside and out, is wholly covered with paint; the handles are painted.



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Fig. 238. Pottery from Chamber-tomb I: 1.



36. Open bowl (fig. 237). H. 0.75 m, d. 0.09 m. Shape as last but rounder body and lower foot. Yellow clay; black varnish, partly worn off. The handles and the body, inside and out, covered with paint, except the lower part and the foot.

37. Cup (fig. 237). H. 0.85 m, d. 0.13 m. Hemispherical body with high ring foot, one flat loop handle, and lip slightly curved outwards. Pale yellow clay; brown varnish. Below the lip a broad, wavy line; the lip is edged with paint, inside and out; the handle has a vertical stroke. On the inside, on the bottom, is a spiral bordered by a band at the upper edge.

38. Saucer (fig. 239). H. 0.06 m, with handle 0.135 m, d. 0.19 m. Shallow open



Fig. 239. Pottery from Chamber-tomb 1: 1.

shape with high, flat loop handle, raised disc-foot; bridged spout on one side. Smooth, greenish-yellow surface, brownish black varnish. On the lower part of the body, four narrow bands. Below the black rim is a broad, wavy line. The foot is black, the handle edged with broad, oblique lines; the spout is black.

39. Stemmed goblet (fig. 235). H. 0.19 m, with handles 0.25 m, d. 0.14 m. Deep, tapering bowl with offset rim and two high, flat loop handles set vertically; stem with dome-shaped foot. Smooth, pale yellow surface, except some sherds which have been exposed to fire and therefore look entirely Grey Minyan. No painted decoration.

40. Stemmed goblet (fig. 235). H. 0.175 m, with handles 0.235 m, d. 0.125 m. Shape as last but bowl not so deep. Smooth, reddish-yellow clay with lustrous surface. No decoration.

41. Stemmed goblet (fig. 235). H. 0.15 m, with handle 0.210 m, d. 0.12 m. Shape as last but with only one handle. Smooth, yellow clay; no decoration.

42. Stemmed goblet (fig. 235). H. 0.115 m, with handles 0.14 m, d. 0.09 m. Open shallow bowl with offset rim and two raised flat loop handles, slanting upwards; dome-shaped foot. Smooth, yellow clay; no decoration.

43. Stemmed goblet (fig. 235). H. 0.21, d. 0.195 m. Deep, open bowl with two low, flat loop handles, set vertically; high stem with disc-foot. Smooth, reddish clay; no decoration.

44. Stemmed goblet (fig. 235). H. 0.14 m, d. 0.14 m. Shape as last. Greenish-yellow clay; no decoration.
45. Stemmed goblet (fig. 235). H. 0.14 m, d. 0.135 m. Shape and clay as last; lustrous surface; no decoration.
46. Stemmed goblet (fig. 235). H. 0.15 m, d. 0.155 m. Shape as last but lower stem. Clay like last; undecorated.
47. Stemmed goblet (fig. 235). H. 0.12 m, d. 0.13 m. Shape as last; reddish clay; undecorated.
48. Stemmed goblet (fig. 235). H. 0.175 m, d. 0.15 m. Shape as last, but open, shallow bowl and very high stem. Paleyellow clay; undecorated.
49. Stemmed goblet (fig. 235). H. 0.15 m, d. 0.12 m. Shape as No. 41 but only one low, flat handle; high stem with dome-shaped foot. Smooth, reddish-yellow clay with lustrous surface; no decoration.
50. Stemmed goblet (fig. 235). H. 0.10 m, d. 0.105 m. Deep bowl with sides sloping gently from the stem, meeting the low, horizontal shoulder at an angle. Low stem; disc-foot. Reddish-yellow clay with lustrous surface. Traces of fire. Undecorated.
51. Stemmed goblet (fig. 235). H. 0.12 m, d. 0.11 m. Shape as last, but higher shoulder. Greenish-yellow clay with traces of fire. Undecorated.
52. Stemmed goblet (fig. 235). H. 0.095 m, d. 0.095 m. Shape and clay as last.
53. Stemmed goblet (fig. 235). H. 0.105 m, d. 0.105 m. Shape as last. Reddish-yellow clay; undecorated.
54. Stemmed goblet (fig. 235). H. 0.11 m, d. 0.115 m. Shape as last. Pale yellow clay; undecorated.
55. Stemmed goblet (fig. 235). H. 0.115 m, d. 0.11 m. Shape and clay as last; undecorated.
56. Stemmed goblet (fig. 235). H. 0.105 m, d. 0.11 m. Shape as last. Reddish-yellow clay with traces of fire; undecorated.
57. Stemmed goblet (fig. 235). H. 0.10 m, d. 0.105 m. Shape as last. Greenish-yellow clay; undecorated.
58. Stemmed goblet (fig. 235). H. 0.10 m, d. 0.10 m. Shape as last. Yellow clay; undecorated.
59. Stemmed goblet. H. 0.115 m, d. 0.12 m. Shape as last. Reddish-yellow clay.
60. Stemmed goblet. H. 0.105 m, d. 0.11 m. Shape and clay as No. 58.
61. Bowl (fig. 240). H. 0.07 m, d. 0.18 m. Shallow shape with wide mouth and narrow, flattened base; sides sloping gently from base, sharply from lip, and meeting at an angle; two horizontal loop handles flat in section. Greyish-yellow surface; undecorated.
62. Bowl (fig. 240). H. 0.65 m, d. 0.16 m. Shape as last. Greyish-brown surface; undecorated.



Fig. 240. Pottery from Chamber-tomb I: 1.

63. Bowl (fig. 240). H. 0.55 m, d. 0.145 m. Shape as last but slightly curved sides and no angle between body and shoulder. Brownish clay; blackish-red varnish. Rim and handles edged, inside on the bottom a spiral.

64. Bowl (fig. 240). H. 0.045 m, d. 0.125 m. Shape and clay as last. Reddish-brown varnish. The rim and handles are edged with paint; the insides entirely painted.

65. Jug (fig. 240). H. 0.11 m, d. 0.105 m. Globular shape with ring foot, out-turned rim, and a flattened loop handle set vertically from rim to shoulder. Rough, brick-red clay, coarse domestic ware; undecorated.

66. Ladle (fig. 240). H. 0.05 m, d. 0.115 m, length of handle 0.095 m. Shallow bowl with flattened base, a slight groove on one side, and a flattened leg-handle at the opposite side, projecting from the rim and bent downwards with a vertical hole pierced through the end of the handle for hanging up. Coarse, red clay; undecorated.

67. Cup (fig. 240). H. 0.055 m, d. 0.115 m. Shallow, conical shape with flattened rim. Greenish-yellow clay; undecorated.

68. Cup (fig. 240). H. 0.045 m, d. 0.115 m. Shape as last. Yellow clay; undecorated.

69. Cup (fig. 240). H. 0.055 m, d. 0.11 m. Shape as last. Reddish clay; undecorated.

70. Cup (fig. 240). H. 0.05 m, d. 0.105 m. Shallow, hemispherical shape. Coarse, red clay; undecorated.

71. Cup (fig. 240). H. 0.05 m, d. 0.095 m. Shape as No. 67. Red clay; undecorated.

72. Cup (fig. 240). H. 0.05 m, d. 0.115 m. Shape and clay as last.

73. Cup. H. 0.05 m, d. 0.105 m. Shape as last. Yellow clay; entirely covered with red varnish.

74. Cup (fig. 240). H. 0.04 m, d. 0.11 m. Shape as last but more open. Yellow clay; undecorated. On the bottom is a mark left by its removal from the potter's wheel.

75. Plate (fig. 240). H. 0.015 m, d. 0.08 m. Flattened base. Reddish clay; undecorated.

There are also numerous fragments of simpler vases, stemmed goblets, cups, etc., which could not be completely pieced together.

*Miscellaneous finds*

*Gold (fig. 241)*

1. Gold ring. Inside diam. 0.021 m, length of bezel 0.028 m, width 0.018 m. Only the outer shell is of gold, the inside consists of bronze. Only half the bezel had been covered with gold and in the other half the bronze had obviously been left showing.<sup>1</sup> On the bezel is a scene of a bull fight with the bull at full gallop, and with lowered head to the left; parallel with the bull's back and following the oval shape of the bezel a man dressed in Cretan kilt, otherwise naked, face upwards, with the right arm extended in the direction of the body and the hand on the neck of the bull, the left hand resting on the back of the bull; at the top, near the edge, are seen three long locks of hair. The motive is to be interpreted as a variation of Motive I in Reichel.<sup>2</sup>

2. Gold ring. The ring is broken, length of bezel 0.025 m, br. 0.015 m. The gold, which is very light in colour, is certainly electron and covers a core of bronze. The upper half of the bezel was in this case made of bronze which is so much destroyed that all details have been obliterated. Here, too, as the lower part shows the scene represented was a bull fight. Above the ground indicated by short, oblique strokes, is seen the lower part of a bull galloping to the left. The lowered horns, and probably the feet of the athlete, are glimpsed to the extreme right.

3. Catch toggle-pin. L. 0.05 m, greatest d. 0.005 m. Bronze bar covered with stout gold leaf, 0.021 m long, leaving uncovered a notch in the middle of the bronze bar, 0.003 m broad. On the gold leaf a single row of linked spirals. For shape compare bone pin No. 39 above, p. 255.

4. Pin-head. H. 0.025 m, br. 0.015 m. A closed, hollow sphere with impressed eye. The piece is made of two pieces of gold leaf moulded in the same shape, and joined in such a way that the joint forms a fine rim; another rim, 0.003 m, runs from the opening where the pin had been attached.

5. Big, round bead. D. 0.013 m. This is made of two hemispherical pieces joined together whose joint has been worked into a thin row of beading. On each half, six groups of gold grains also in granulated work; around the string-hole a row of granulated beads.

6. Two pendant spirals. H. 0.015 m, br. 0.013 m. These are made each of two thin sheets of gold, the one behind smooth, the front one adorned with a pendant spiral *en creux*, and at the top a straight obliquely grooved bar with string-hole.

<sup>1</sup> Similar rings are known from Crete and the mainland. They should be explained with reference to inlay work (cf. Persson, *The Royal Tombs*, p. 48 f.) and are evidence of a technique that worked in different metals and the colour-effects thereby produced.

<sup>2</sup> Cf. Reichel, *Die Stierspiele in der kretisch-mykenischen Kultur*, in *Ath. Mitt.* XXXIV (1909), p. 85 ff.; cf. also Evans, *Palace of Minos* 111, 222 f.



7. Eight large rosettes of gold leaf, more or less fragmentary. D. 0.031 m. Each rosette has 12 petals with double outlines at the outer edge, made *en creux*. Four holes for fastening at the edge.

8. Thirteen whole and some fragmentary gold rosettes. D. 0.007 m. Each rosette is made of two pieces of gold, joined together, the upper one representing a flower with eight petals. Instead of using the two parallel threading-holes, which are typical



Fig. 241. Gold objects from Chamber-tomb I: 1.

of these beads (cf. Chamber-tomb I: 5, Small finds 1) the upper piece of gold leaf has been pierced to make it possible to attach them to cloth — a secondary use.

9. Gold-mounted heads of bronze nails; two entirely preserved fragments of others. D. 0.012 m. Similar ones have been found in the vaulted tomb at Dendra in their original position close to the hilt of a bronze sword, where they had served for fastening on the wood of the hilt.<sup>1</sup>

10. Thin annular piece of gold leaf. L. about 0.06 m. Probably used to cover an annular mounting.

#### Silver

Small fragments of a vase with linear decoration; very badly oxidized.

#### Iron

Fragments of a finger-ring, very much rusted.

#### Semi-precious stones (fig. 242)

1. Lentoid gem. Dark agate with threading-hole following the vertical axis of the design.<sup>2</sup> L. vertically (along the perforation) 0.024 m, horizontally 0.025 m. Two bulls lying in opposite directions with the forepart of the body outwards and the heads turned inwards. The line of the ground marked by double lines. As a filling between the heads of the bulls, there is a group of three circles, below the line of the ground a row of four. For design, cf. *Δελτίον*, 1918, Pl. V., No. 2.

2. Lentoid gem. Cornelian, with vertical threading-hole; damaged. L. vertically 0.018 m, horizontally 0.019 m. A calf (no horns visible) lies, turned left; above it, a lion attacking the calf's neck.

3. Lentoid gem. Greyish stone (agate?) with threading-hole following the horizontal axis of the representation. L. horizontally 0.021 m, vertically 0.02 m. Two very slender bulls standing on their hind legs, with their bellies outward and with their arched necks meeting each other in the centre of the upper edge, both terminating in at large single head. Between the bodies and framing the head a plant with two branches at the bottom, at the top the branch divides into two similar branches (Tree of life?). Above the point of junction, between the two necks of the bulls, a curved line opens out towards the edge.

4. Rectangular gem. Stone like preceding one but threading-hole follows the vertical axis of the representation. L. vertically 0.018 m, horizontally 0.014 m. A very slim bull standing on his hind legs, with his belly turned outwards (position as on the preceding gem), head slightly bent back. Behind the bull stands a man dressed in a Cretan kilt, grasping in his left hand the bull's muzzle, with the right one of his horns. We certainly have here the last act in a bull fight, where the victorious

<sup>1</sup> Cf. Persson, *The Royal Tombs at Dendra*, p. 36, No. 15.

<sup>2</sup> As to the use of these stones, cf. *ibid.* p. 58.



Fig. 242. Semi-precious stones from Chamber-tomb I: 1 (1—4 from casts).

athlete with this grip breaks the bull's neck. Cf. representations where the same action is being performed on bulls lying down.<sup>1</sup>

5. Amulet. H. 0.015 m, br. 0.015 m. Cornelian. From a projection pierced by a string-hole is suspended a crescent with disc. An exactly identical specimen can be compared from Egypt,<sup>2</sup> and the one from Asine is certainly an imported object from Egypt. The amulet is in Egypt named Aoh, and has for its purpose »the protection of the moon god against the evil eye and witchery: Period XVIII to Roman».<sup>3</sup>

#### Faience (fig. 243)

1. Large, round bead. L. along the string-hole 0.015 m, br. 0.018 m. Globular shape with hollow grooves with double outlines running at right angles to each other.

2. One bead, pierced vertically, representing a bud or perhaps a shell. L. 0.014 m, br. 0.016 m. Exactly the same shape in gold, cf. e. g. Chamber-tomb I: 5.<sup>4</sup>

3. Tubular bead. L. 0.006 m, br. 0.005 m.

<sup>1</sup> Evans, *Palace of Minos* III, p. 222 f.. For the bull fight, cf. Persson, *Tjuren vid hornen*, in *Med hacka och spade* Stockholm 1935, p. 43 ff.

<sup>2</sup> Cf. Flinders Petrie, *Amulets*, Pl. VI, 85 m.

<sup>3</sup> Flinders Petrie, *Amulets*, p. 23.

<sup>4</sup> Below, p. 399. In faience at Dendra, cf. Persson, *The Royal Tombs*, p. 105.

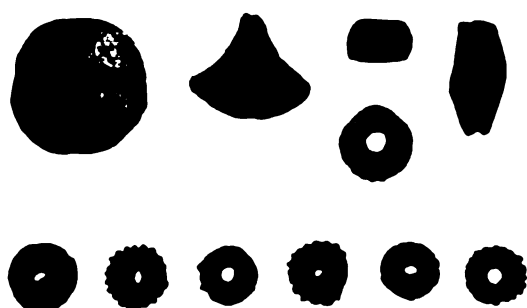


Fig. 243. Faience objects from Chamber-tomb I: 1.

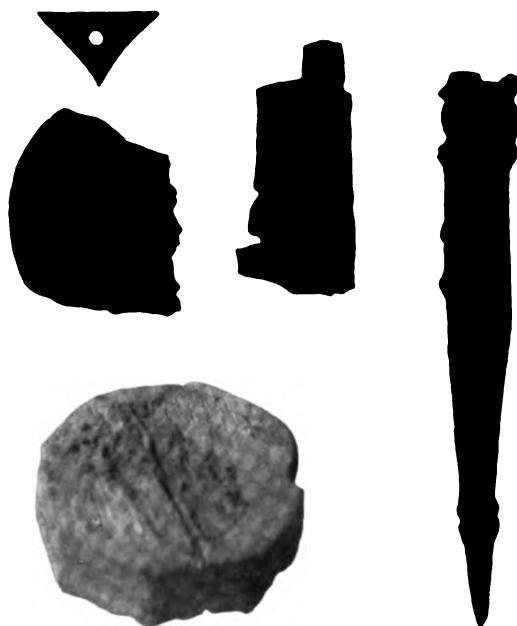


Fig. 244. Ivory and bone objects from Chamber-tomb I: 1.

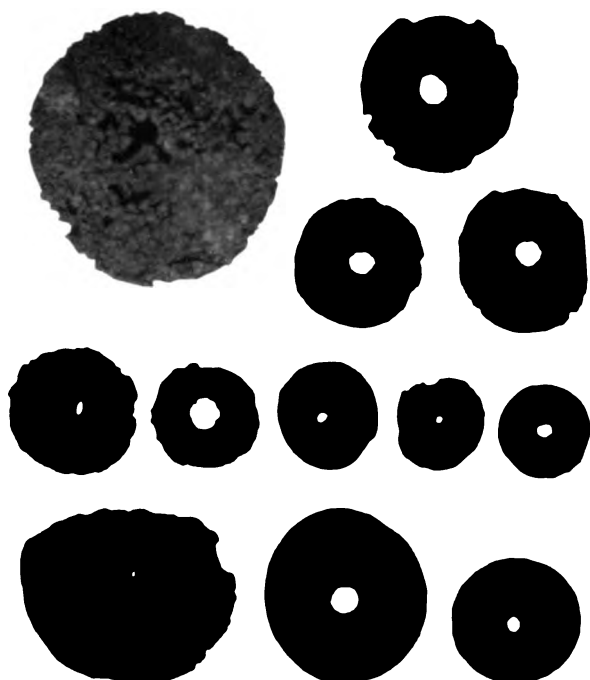


Fig. 245. Amber and resin objects from Chamber-tomb I: 1.

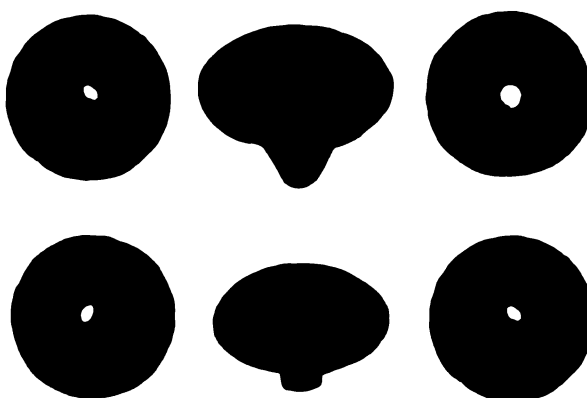


Fig. 246. Steatite buttons from Chamber-tomb I: 1.



4. Amygdaloid bead with ribs along the edges and lengthwise down the centre. L. 0.015 m, br. 0.007 m.<sup>1</sup>
5. Flat, ribbed bead. D. 0.01 m, h. along the eyelet 0.002 m.
6. Six ribbed, carinated beads. D. 0.009 to 0.007 m, h. along the threading-hole 0.005 to 0.004 m. Fragments of other similar beads.

#### Ivory and bone (fig. 244)

1. Pin made of ivory. L. 0.74 m, br. 0.01 m. The head is decorated with volutes — possibly a rough indication of two animals placed in opposite directions to one another — moulded rim near the pint. One side narrows into a sharp edge, the other is provided with sharp edges and on these two projections.
2. Piece of a small column of ivory. H. 0.033 m, br. 0.022 m. Moulded base, handle ornamented with leaf-pattern, a pin at the top.
3. Fragment of a large ivory rosette. Estimated d. 0.036 m.
4. Small, pierced ivory tringle. L. 0.016 m.
5. Octagonal, flat piece of bone. D. 0.32 m, h. 0.01 m. Moulded filed edge. Four pivot holes — in three of them are left broken-off pins — showing that they had been attached to something else.
6. Pieces of wild boar's tusks.<sup>2</sup>

#### Amber and resin (fig. 245)

1. Eleven large and small beads made of amber. D. 0.032—0.009 m, h. along the threading-hole 0.01—0.003 m. The surface is very much corroded. Some of them could be observed during the excavations but were in such a condition that they fell to pieces on being picked up.
2. Five larger and smaller beads of a black, resinous composition. D. 0.028—0.01 m, h. along the hole 0.009—0.003 m. Fragments of others.

#### Steatite (fig. 246)

Buttons of different shapes.

A. Thirteen of the ordinary, conical type. H. 0.02—0.01 m, d. 0.03—0.016 m. Six of these of the same size were found close together.

B. Fifteen have a smooth base with concave notch round the string-hole. H. 0.019—0.008 m, d. 0.026—0.015 m.

C. Four with hollows on base and notch on back, so that only a tube remains round the hole. H. 0.014—0.012 m, d. 0.024—0.02 m.

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\*

<sup>1</sup> The same shape is common at Dendra, cf. l. c., p. 30, No. 18.

<sup>2</sup> Helmet decoration. Cf. Persson, l. c., p. 103, No. 17.

Amongst the vases in this tomb the earliest and the latest can be easily distinguished from the remaining ones by the circumstances in which they were found. The earliest had been smashed on the occasion of later burials, and fragments of them, together with bones, had been swept inside the lateral chamber. These are Nos. 1, 4, 21 25, and 26. The latest were found *in situ* close to the skeleton of the last corpse: Nos. 29, 30, and 31. Just inside the later dromos lay a huge accumulation of vases which had probably been at one time placed on a table. They also surely belong to one of the last burials. They include *inter alia* Nos. 23, 27, and the late stirrup-vase, No. 7, stemmed goblets with angular shoulders, Nos. 52, 53, 55, 56, bowl No. 64. On the whole, the vases found on the higher floor-level in the southern part of the chamber, inside Dromos I, are of a late date.

## CHAMBER-TOMB I:2

*Stone vessels* (fig. 247)

1. Bowl. Fragments found both in the chamber and in the dromos, rather more than half preserved. H. 0.135 m, d. 0.216 m, d. of mouth 0.07 m. Shallow shape with

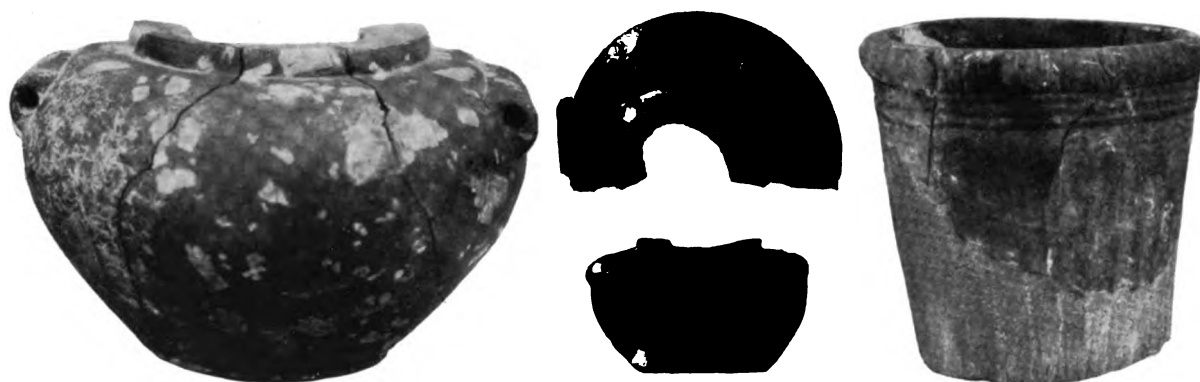


Fig. 247. Stone vessels from Chamber-tomb I:2.

low, vertical, broad rim, and with two horizontally pierced »Schnurösenhenkel« at the opposite sides of the shoulder angle; flat base. The material is porphyry containing white bits of hornblende. Similar ones were found in Crete imported from Egypt, and also local stone imitations, cf. Evans, *Palace of Minos I*, p. 67. Both the material and the technique show that the vase from Asine is of Egyptian origin and belongs to the Predynastic or Early Dynastic period, cf. Flinders Petrie, *Prehistoric Egypt*, Pl. XXXVII, and Pendlebury, *Aegyptiaca*.

2. Funnel-shaped rhyton. Fragments. Preserved h. 0.115 m, d. 0.12 m. Red stone, so-called *Lapis Lacedaemonicus*. A roll mouth, with vertical grooves, then three annuli, then flutes which terminate at the top in double crescents. Two fragments exist of the handle, which had been made separately. In the part of the mouth preserved

drill holes with remains of bronze rivets showing that it was attached in the same sort of way as that of the famous steatite rhyton from Hagia Triada (M. H. III B) or on the Cup Bearer Fresco, Knossos (L. M. I A), reproduced, cf. Evans, *Palace of Minos II*, supplementary Pl. XXIV. A similar fragment, but from a vase of somewhat larger proportions, was found at Mycenae, cf. Wace, *Excavations at Mycenae*, BSA XXV, p. 183 f. and fig. 36.

3. Lamp of steatite, very much damaged. H. 0.07 m. On the rim, round the bowl, are raised coils resembling shells. Lamps with a similar decoration were also found in Chamber-tomb I: 7 (cf. p. 407) and in many other places, e. g. at Mycenae,<sup>1</sup> at Dendra<sup>2</sup> in the Isopata tomb.<sup>3</sup>

Furthermore, there were found some fragments of three squat alabaster bowls of different dimensions, but very much corroded by moisture. There was also found the rim of a small vase of black stone, spotted with green. The same kind of stone was used for a shallow bowl in Chamber-tomb No. III at Dendra<sup>4</sup>.

#### Pottery

4. Three-handled jar of L. M. II Palace style (fig. 248: 1); sherds from practically the whole chamber and from the dromos. H. 0.71 m, d. 0.46 m, inside d. of mouth 0.16 m. Tall shape; the shoulder has a spherical curve, the body rather contracted below in a hollow curve; the foot spreads into a roll; the vertical neck has a moulding at the base and a wide projecting rim. At the base of the neck is a raised moulding. Reddish coarse clay with yellow slip and red-black varnish. The decoration embraces the whole body of the vase. Between each pair of the ribbed handles are three large spirals, their eyes filled with a floral pattern, and with two smaller spirals, and some parallel curved chevrons filling the wedge-shaped space between the large ones. Beneath the painted handles, stout stems run down to the foot from which, three times repeated, issue pairs of kidney-shaped excrescences;<sup>5</sup> both the stems and the excrescences are evenly stippled with reddish-black varnish, imitating the natural surface of an ostrich egg.<sup>6</sup> On the shoulder a band the lower edge of which is wavy; on the neck above the moulding a broad, black band, then three wavy bands; the rim is black on the under-side, on the upper side painted with a wavy band.

5. Three-handled jar (fig. 248: 2); sherds strewn over the whole chamber and in the dromos fill right up to the topmost stratum. H. 0.45 m, d. 0.36 m. The lower part of the body curves inwards from the round shoulder to a narrow foot with spreading

<sup>1</sup> JHS XXIV, 1904, p. 324, Pl. XIV a.

<sup>2</sup> Persson, *The Royal Tombs at Dendra*, p. 101.

<sup>3</sup> *Archaeologia LIX*, p. 540, Pl. XCVIII.

<sup>4</sup> Persson, *l. c.*, p. 86.

<sup>5</sup> These kidney-shaped excrescences remind one to some extent of the puzzling so-called 'Doppelbeile', which are to be found on no fewer than 4 vases from Shaft-Grave I at Mycenae, cf. Karo, *Schachtgräber von Mykenai*, Pl. CLXVII and p. 67.

<sup>6</sup> For this style of decoration, cf. Forsdyke, *Prehistoric Aegean Pottery*, B. M. Catalogue of the Greek and Etruscan Vases I, 1, p. 136.



Fig. 248. Pottery from Chamber-tomb I: 2.



edge. Yellow clay with brownish varnish. The shoulder-band, which is wider than the ribbed handles, is crowded with dot-filled murex shells, plastic knobs with circles of dots at the base, concentric circles with plain or dotted lines, and linked small hooks. The handles are outlined by three bands, one over the foot, and three other bands below the painted neck. The rim has a herring-bone pattern on its upper side.

6. Three-handled jar (fig. 248: 3); sherds from the whole chamber, the bulk from D 2—E 3, and some from the dromos (A 3, 5, 6; B 2, 5; C 2; D 2, 3, 4, 5; E 2, 3, 4, 5; F 3, 5, 6; G 5). H. 0.52 m, d. 0.42 m. The body tapers straight from the spherical shoulder to the foot, which spreads in a roll. Red clay with yellowish-grey surface; reddish-black varnish. The shoulder-band, which is wider than the ribbed handles, has between each pair of handles an argonaut with triple coils of the L. M. III type.<sup>1</sup> The filling ornaments which occur are quite certainly also parts of the original marine motives which have nevertheless here degenerated into purely decorative elements. The three small horseshoe-shaped figures grouped together are again encountered as a unit on the Marseilles ewer, and on stirrup-vases with marine motives,<sup>2</sup> and there form part of a more naturalistic seascape. The triangular filling motive is a stylised shell. The body between the shoulder and foot is twice encircled by a thick band between thin bands. On the shoulder, below the neck, is a band; foot, neck, and handles are painted black. The rim is edged with paint and decorated with groups of bars.

7. Three-handled jar (fig. 249: 1); sherds strewn all over the chamber (A 3, 4, 5, 6; B 3, 5, 6; C 1, 5, 6; D 4, 5, 6; E 2, 4, 5, 6; F 5, 6), some in the filling of earth in the stomion, others in the dromos. H. 0.47 m, d. 0.38 m. Very small handles; shape and clay as last; yellowish-grey surface with reddish-black varnish. The shoulder-band, which is wider than the ribbed handles, is filled with a scale-pattern with all the outlines double, and hatched figures like leaves placed obliquely in the empty spaces.<sup>3</sup> Bands near the neck, on the body, and over the foot, the handles encircled; neck, foot, and handles are painted. The edged rim has running spirals.

8. Three-handled jar; from the chamber (B 1, 2; C 2, 3; D 2 a lot, 3; E 2, 3; G 5). H. 0.395 m, d. 0.33 m. Shape as last. Red clay with greenish slip and black badly preserved varnish. The shoulder-band, which is wider than the handle, encloses three parallel rows of horizontal flowers with pistils and short dashes probably representing stamens; thick lines in the angle represent petals. The flowers represent sprays of papyrus.<sup>4</sup> The body is encircled by two bands; the neck, foot, and handles are black; on the rims are groups of bars.

<sup>1</sup> Cf. Rapport prélim., p. 86, and Evans, *Palace of Minos II*, p. 511 f. and figs. 312—314. — For illustrating the development of the motive on the Greek mainland compare further Furtwängler-Loeschke, *Mykenische Thongefässe*, Pl. III 12 a, and *Mykenische Vasen*, p. 80, BSA XVII, Pl. XI, Nos. 137 and 140; *Ath. Mitt.* XXXIV, 1909, Taf. XVI; B.M. Catalogue I, 1, p. 106, A. 651 and p. 146, A. 829.

<sup>2</sup> Cf. e. g. Furtwängler-Loeschke, *Myk. Vasen*, Pl. XIV, 87.

<sup>3</sup> With regard to the origin of the pattern and its development cf. Rodenwaldt, *Tiryns II*, p. 236; for the question of its origin cf. now also «the octopus cup» from Dendra in the author's, *The Royal Tombs at Dendra*, p. 43 f.; scale-pattern on textile reproductions, cf. Wace, *A Cretan Statuette in the Fitzwilliam Museum*, p. 335 f.

<sup>4</sup> Cf. Evans, *Palace of Minos II*, p. 477, fig. 285; the shape resembles most closely Furtwängler-Loeschke, *Myk. Vasen*, Pl. XXX, 264, with the button on the pistil here round.

9. Three-handled jar (fig. 249: 2); from the chamber (D 2 several sherds, 3; E 2, 6; G 5 several). H. 0.32 m, d. 0.27 m. The body tapers in a hollow curve; the handles are set unusually near the neck; below the neck is a moulded band. Greyish clay with yellow slip; black varnish. Two decorated zones, the upper on a level with the handles, with close parallel bars, the lower in a broad belt round the middle of the body of the vase, with dotted, simple scale-pattern; between the zones, there is no line but a row of rosettes. Below the neck is a band of plain triangles with the points downwards and dots between these. The lower part of the body is ringed with bands; the neck, foot, and handles are black. The rim has the same decoration as we find below the neck.

10. Three-handled jar (fig. 249: 3); sherds from the chamber and the earthfill in the stomion (A 3, 4; B 2, 3, 5, 6; C 3, 4, 5; D 4; E 2, 4, 6; F 1, 6; G 5). H. 0.27 m, d. 0.21 m. The lower part of the body is elongated, curving inwards from the round shoulder to a narrow foot with spreading edge. Greyish clay with greenish-yellow slip and brownish-black varnish. The shoulder-band, which is wider than the ribbed handles, is filled with close parallel bars. The lower part of the body is twice encircled by groups of three bands; the neck, foot, and handles are black. The rim is barred.

11. Jug (fig. 249: 4); from the chamber (on the left, inside the stomion). H. 0.29 m, d. 0.24 m. Globular body with tall, cylindrical neck; the mouth is turned outwards and upwards in a hollow curve; the handle is a large loop set on vertically from the shoulder to the rim. Red clay with thin, greyish slip and reddish-black varnish. Between the shoulder and body are three plain bands; on the body, below the neck and on the belly, one band; on the handle is a wavy line.

12. Three-handled jug (fig. 249: 5); from the chamber (A 3, 4, 5, 6; B 1, 2, 3, 5, 6; C 4; D 4, 6; F 1; the earth filling inside the door). H. 0.25 m, d. 0.16 m. Piriform body; short, narrow neck with raised ring at base, trough-shaped beak-spout tapering upwards; three round loop handles, arching from the back and sides of the spout to the top of the shoulder. Red clay with yellow slip; red and black varnish. On the shoulder, between the handles, are some conventional hatched flowers with curved lines alternating with triangles filled with vertical lines; broad and narrow bands fill the entire space between the foot and the shoulder; neck, spout, and handles are banded; the foot is black.

13. Three-handled jug (fig. 249: 6); from the chamber. H. 0.185 m, d. 0.135 m. Globular body, narrow neck, raised ring at the base, trough-shaped beak-spout tapering upwards; three flat loop handles curving from the back and sides of the spout to the shoulder; ring foot. Yellow slip with dull, brown varnish. On the shoulder, springing to the right, are some flowers with their calyces composed of two parallel chevrons and with solid, curved petals. On the body is a broad band with a pattern of three parallel, wavy lines and chevrons repeated three times; above and below



Fig. 249. Pottery from Chamber-tomb I: 2.

are thick and thin bands. The neck is decorated with plain triangles rising from the moulding. The handles and foot are black, the spout is edged with paint.

14. Stirrup-vase (fig. 249: 7) with three handles; sherds from the chamber, the pit in the chamber (B 6; C 5, 6; D 4, 5, 6; E 5; F 3, 4; G 1, 5), the filling of the stomion, and that of the dromos. H. 0.215 m, d. 0.17 m. Piriform body with spreading foot; short, broad, false neck and spout; three flat loop handles from the top of the false neck to the shoulder.<sup>1</sup> Yellow clay and slip with brownish-black varnish. On the wide shoulder are four upright flowers, their calyces composed of three or four curved chevrons diminishing upwards, and the petals of an arc of dots. The body is ringed with broad and thin lines. The top of the false neck has a flower; the foot is black; the handles are banded and at the shoulder surrounded by thick loops from which floral figures depend; two broad petals and a dash between them, possibly representing stamens.

15. Stirrup-vase (fig. 249: 8); from the chamber (G 6). H. 0.13 m, d. 0.115 m. Globular shape. Light yellow clay; brownish-black varnish. Within the handle area

<sup>1</sup> For the shape, cf. Rapport prélim., p. 86.

four conventional flowers with curling stalks. On the body are groups of thin lines between broad, plain bands. There is a loop round the spout and false neck; the handles, spout, and false neck are edged with paint; on top of the false neck is a spiral with a plain eye.

16. Stirrup-vase. From the chamber (A 4). H. 0.17 m, d. 0.15 m. Flattened, globular shape. Reddish clay with dull, reddish-brown varnish. The decoration is done rather carelessly. Within the handle-zone, opposite the spout, is a crowded composition of parallel, wavy lines, chevrons, and other hatched figures; on each side of the spout is a triangular patch of scale-pattern. The body is encircled with bands. There is a loop round the spout and neck; the edged handles are decorated with chevrons; the spout is edged with paint; on the conical top of the false neck is a spiral.

17. Stirrup-vase. From the chamber (A 3). H. 0.125 m, d. 0.11 m. Globular shape. Yellow clay; brownish varnish of poor quality. Within the handle-zone are triangles doubly outlined with plain angles and then concentric arcs; in the middle is a circle with a dot in the centre. The body is encircled with bands. There is a loop round the neck and spout. On top of the false neck is a spiral.

18. Stirrup-vase. From the chamber (A 3). H. 0.095 m, d. 0.087 m. Globular shape. Greenish-yellow clay with brownish-black varnish which has mostly worn off. Within the handle-zone, opposite the spout, is a conventionalized floral design, composed of two spirals with two parallel strokes between them;<sup>1</sup> on either side of the spout and false neck, three parallel wavy lines. The top of the false neck is slightly conical and painted with a spiral; air-hole on the shoulder.

19. Stirrup-vase (fig. 250: 1). From chamber (A 4). H. 0.245 m, d. 0.19 m. Spherical shape with small handles. Yellow clay; brown-black varnish. Within the handle-zone conventional flowers, composed of three chevrons with arcs between the innermost and a row of dots at the top, and ornaments composed of two parallel chevrons with plain angle, and groups of arcs at both sides. On the body is a broad plain band among thin lines. A loop connects the bases of spout and false neck. The top of false neck is slightly conical and painted with a spiral.

20. Stirrup-vase. Sherds partly damaged by fire, scattered over the chamber (A 3; D 2; E 1, 2, 3, 4; G 5). H. 0.09 m, d. 0.12 m. Flattened, globular body with flat base. Yellow clay with reddish-brown varnish. Within the handle-zone are groups of parallel lines, forming triangles. The body is encircled with lines. On the false neck are concentric circles.

21. Stemmed goblet; in the chamber. H. 0.185 m, d. 0.14 m. Shallow bowl with out-turned rim and two high, flat loop handles; high foot with concave base. Smooth, yellow clay; undecorated.

22. Stemmed goblet; in chamber (D 4; E 4; F 3). H. 0.185 m, d. 0.13 m. Shape as last but only one high, flat loop handle. Yellow clay; undecorated.

<sup>1</sup> For the shape, cf. B. M. Catalogue I. 1, p. 191, A 1011.



23. Stemmed goblet; in chamber (B 3; C 5). H. 0.155 m, d. 0.13 m. Deep oval bowl with out-turned rim and one high, flat loop handle. It originally had two, but one had been broken off and the fractures ground down already in Mycenaean times. Smooth, yellow clay; undecorated. Foot like the preceding.

24. Stemmed goblet; in chamber (D 3; F 3). H. 0.12 m, d. 0.103 m. Shape and clay exactly the same as No. 21; undecorated.

25. Stemmed goblet; in the chamber (A 3; E 2, 3; F 1, 2; G 1). H. 0.20 m, d. 0.185 m. — Deep tapering bowl with out-turned rim and two small, flat loop handles; stem with disc-foot. Greyish clay; undecorated.

26. Stemmed goblet; chamber (A 3; E 3, 4; F 2, 3). H. 0.16 m, d. 0.142 m. Shape as last. Greenish clay; undecorated.

27. Stemmed goblet; chamber (B 5; C 5; F 3; G 3). H. 0.115 m, d. 0.118 m. The body has a sharp angle at the shoulder, rising in a reverse curve to the lip, which is splayed outwards; one small flat loop handle springing horizontally from the lip. Yellow clay; undecorated.

28. Stemmed goblet; in chamber (B 5; C 5; F 6). H. 0.10, d. 0.11 m. Shape and clay as last.

29. Stemmed goblet; chamber and filling of dromos (F 1; filling of dromos). H. 0.097 m, d. 0.11 m. Shape and clay as last.

30. Stemmed goblet; chamber (F 2, 3). H. 0.097 m, d. 0.104 m. Shape and clay as last.

31. Stemmed goblet; chamber (C 3; B 3; earth filling inside door). H. 0.095 m, d. 0.10 m. Shape and clay as last.

32. Stemmed goblet; chamber (F 5; G 3). H. 0.095 m, d. 0.107 m. Shape as last; red clay.

33. Stemmed goblet; chamber (D 3, 4). H. 0.11 m, d. 0.105 m. Shape as last; greenish clay.

34. Spreading, open bowl. Chamber. H. 0.07 m, d. 0.15 m. Conical shape with wide mouth and narrow base, sides contracted in a hollow curve. Two flat loop handles set horizontally below the lip and one on side between these is an open trough-spout. Light greenish surface; brownish-black varnish. Simple, parallel stripes on the outside and one stripe on the inside, below the rim; concentric circles on the bottom.

35. Spreading open bowl; chamber (D 3; E 1, 3). H. 0.04 m, d. 0.05 m. Shape as last but bridged spout. Black clay; undecorated.

36. Spreading open bowl; chamber (D 4). H. 0.035 m, d. 0.06 m. Shape and clay as last, but open spout.

37. Bowl; chamber (B 3; F 5). H. 0.04 m, d. 0.105 m. Shallow form, wide mouth, and narrow base, with sides sloping gently from the base, sharply from the lip, and meeting at a slight angle; two high, flat loop handles. Reddish-grey clay; undecorated.

38. Bowl; chamber (A 3; F 2). H. 0.06 m, d. 0.15 m. Shape as last but sharp angle at shoulder and two horizontal loop handles flat in section; reddish, polished clay.

39. Bowl; chamber (A 3; F 3; G 1). H. 0.055 m, d. 0.15 m. Shape as last reddish-yellow clay.

40. Cup; chamber (E 3; C 1, 4, 5; F 6). H. 0.05 m, d. 0.128 m. Low, conical shape; roughly made. Reddish-brown clay; undecorated.

41. Cup; chamber (C 5; D 3, 4; E 4; F 4, 5). H. 0.05 m, d. 0.116 m. Shape and clay as last.

42. Cup; chamber (C 3; D 3; G 1). H. 0.05 m, d. 0.115 m. Shape as last. Yellowish clay.

43. Cup; chamber (C 4; D 4; E 3). H. 0.045 m, d. 0.105 m. Shape as last; yellow clay.

44. Cup; chamber (A 3; F 2). H. 0.04 m, d. 0.12 m. Shape and clay as No. 40.

45. Cup; chamber (earth filling inside the door). H. 0.045 m, d. 0.113 m. Shape as last; reddish clay.

46. Cup; chamber (B 2, 3; C 2, 3; F 6; G 1). H. 0.045 m, d. 0.105 m. Shape and clay as last.

47. Two-handled jar (fig. 250: 2); from chamber and dromos; lower part missing. H. about 0.50 m, d. 0.33 m. Tall shape; the body is slightly contracted and curves in towards the base. The neck, which is short and tapers upwards, supports a thick, out-curved rim; two vertical loop handles on the broadest part of the body. Brick-red clay; undecorated.

48. Tripod cooking vessel (fig. 250: 3); chamber (earth filling to the left of and inside the door). H. 0.23 m, d. of mouth 0.17 m. The body has a flattened, globular shape with out-turned rim. On the shoulders is a round loop handle set vertically. The feet are flattened and taper towards the bottom. Rough, brick-red ware.

49. Jug. Chamber (A 3; C 5; D 2, 4; E 2, 3, 4; F 3; earth filling inside the door). H. 0.195 m, d. 0.18 m. Globular shape with out-turned rim and a round loop handle set vertically on the shoulder. Rough, brick-red ware.

Wholly from the dromos come the following vases:

50. Two-handled jug (fig. 250: 4). H. 0.32 m, d. 0.205 m. Piriform body; short, narrow neck with raised ring at base, beak-spout tapering upwards, two round loop handles, curving from the sides of the mouth to the top of the shoulder. Greenish-yellow clay; undecorated.

51. Stemmed goblet (fig. 250: 5). H. 0.16 m, d. 0.168 m. The body has straight, tapering sides and two flat loop handles; dome-shaped foot. Red surface, finely lustrous; undecorated.

52. Stemmed goblet. H. 0.165 m, d. 0.18 m. Shape and clay as No. 25.

53. Stemmed goblet. H. 0.085 m, d. 0.115 m. Shape and body as last but only one handle. Low stem. Yellowish-red clay. Undecorated.



Fig. 250. Pottery from Chamber-tomb I: 2.

#### Miscellaneous finds

##### Gold (fig. 251)

1. Twenty-one thin gold rosettes with flower petals *en repoussé* and with holes for attachment at the edges; d. 0.02 m. Eight of these were found in the dromos, one in the stomion, and the remainder in the chamber. Cf. The Royal Tombs at Dendra, p. 27.

2. Twenty-two spiral pendants *en repoussé* work with fluted edge, with a threading-hole, h. 0.01 m, br. 0.007 m. Two were found in the stomion, the rest in the chamber itself, two of these being discovered below the skeleton in the shaft. Cf. The Royal Tombs at Dendra, p. 40.

3. Nineteen beads with two holes for threading, l. along the axis 0.01—0.007 m, br. 0.11—0.007 m. The beads are hollow and composed of two thin sheets of gold set together, the upper one showing a conventionalized ivy-leaf ornament in reliefs. Exactly the same type occurs in glass-paste. All the beads are from the chamber. Cf. The Royal Tombs at Dendra, p. 30.

4. One bead composed of two rosettes fitted together, and fragment of a similar rosette, d. 0.008 m. Technique and finish the same as preceding.

5. One small bead representing a bud. H. 0.005 m, br. 0.005 m.

6. Two large pendants representing sprays of papyrus. H. 0.03 m, br. 0.03 m. From a ring, there issue two leaves to the sides, a third one forming the central axis. On both sides of this, to the apex of the two lateral ones, a compact filling of pistils. For the shape, cf. *The Palace of Minos II*, p. 477, fig. 285 F (L. M. I b). Technique and finish the same as No. 3.

7. Nine discs edged with filigree work, forming hollow settings to be filled with coloured glass-paste — two of them have traces of such filling preserved; d. 0.14—0.008 m. Cf. *The Royal Tombs at Dendra*, p. 34.

8. Eight gold mounts for the heads of bronze rivets; d. 0.01—0.005 m.

9. Four flower-buds of thin gold leaf, with projecting stamens; h. 0.025 m, br. 0.015 m.

10. A large quantity of thin, shapeless pieces of gold leaf found in different parts of the chamber and dromos.

#### Ivory and bone (fig. 252)

1. Nine flower-buds with projecting stamens; in the eyes, which are formed by the spirally rolled ends of the calyces, there are round, bowl-shaped cavities for mounting rock-crystals. H. 0.02 m, br. 0.028 m. Fragments of others from the chamber and dromos. They certainly served as inlay for decorating a coffin and remind one of

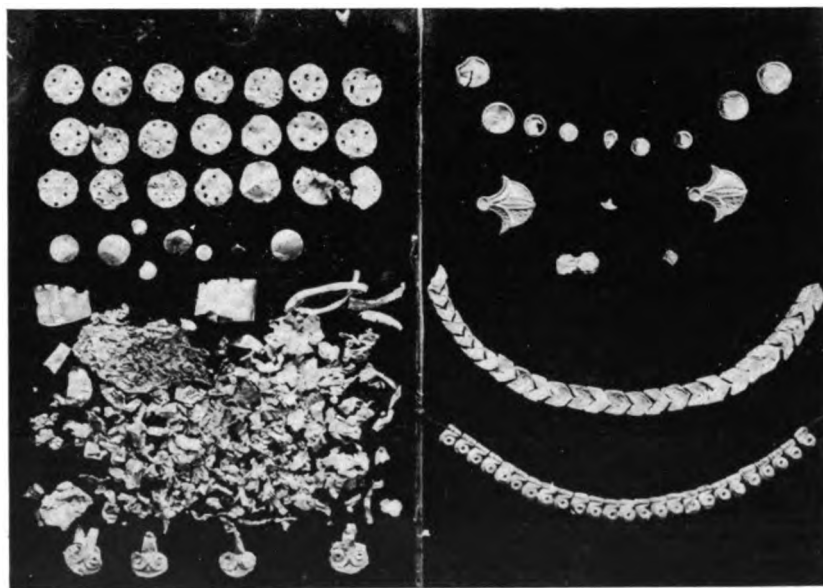


Fig. 251. Gold objects from Chamber-tomb I: 2.



those which ornamented a wooden box from the tomb of the Tripod Hearth, Chamber-tomb No. 14, from the cemetery at Zafer Papoura.<sup>1</sup>

2. Fragments of the lid of a pyxis. Estimated diameter 0.07 m. In the centre is an eight petalled flower surrounded by a spiral coil deeply incised. In the zone between the latter and the smooth outer ring had been two birds with long, strong beaks and comparatively short, extended necks, which from the greatly marked set of the wings may perhaps be looked upon as being in flight. The plumage is indicated by pairs of fine parallel lines, with broader belts between, decorated in the centre with a row of small ovals and by two diagonal strokes along the outer edge. A similar pyxis lid from Menidi, cf. *Das Kuppelgrab bei Menidi*; Taf. VII, 2, there with goats.

3. Head of a wild duck or Nile goose (fig. 254). L. 0.095 m, h. 0.027 m. The head is meticulously made, especially the base of the bill and the nostrils. The part of the head corresponding to the neck is provided with a hole for a pivot. The head had been painted in a dark colour, the whole surface is greatly corroded; the original blue colour is still preserved in the centre of the eye and in the circle surrounding it.

The head probably belonged to a toilet casket of the same kind as those of which a couple of specimens in ivory were recently found at Ras Shamra (fig. 254).<sup>2</sup> A similar one was found in tomb No. 31 at Ialysos, in the year 1871.<sup>3</sup> The head, which was turned back, served as a handle. It is probable that they, or at least their prototypes, originally came from Egypt where similar ones have been found, some also made of wood, with or without ivory inlay.<sup>4</sup> Probably the greater part of the toilet casket from Asine was made of wood, since no other remains of it have been found. The bird's head itself points to Egypt, was undoubtedly a Nile goose, a cross between a wild duck and a goose, which served as model for it.<sup>5</sup>

4. Fragment of an ivory staff with a pin in one end (fig. 252), broken off at the other. L. 0.085 m, d. 0.02 m. The surface of the whole staff is covered with a well-executed scale-pattern.

5. Seven buttons with a shallow groove along the edge; d. 0.03—0.015 m.

6. A large quantity of fragments of ivory plaques, some of them pierced with fine holes for fastening; remnants of small ivory strips which surely once framed the flower-buds, above No. 1, on the wooden box. Such fragments were found in both the chamber and in the dromos.

7. Bone pin (fig. 252). L. 0.105 m. Two annuli at the upper end.

8. Ten small bone plaques (fig. 252), quadrangular and rectangular; h. 0.02 m, br. 0.02—0.012 m.

<sup>1</sup> Cf. *Archaeologia* LIX, 1905, p. 434, fig. 40.

<sup>2</sup> Cf. *Syria* XIII, 1932, Pl. VIII, 2.

<sup>3</sup> Cf. Furtwängler-Loeschke, *Mykenische Vasen*, p. 14 and fig. 3.

<sup>4</sup> Cf. Furtwängler-Loeschke, l. c., p. 15.

<sup>5</sup> Cf. *Rapport prélim.*, p. 88.

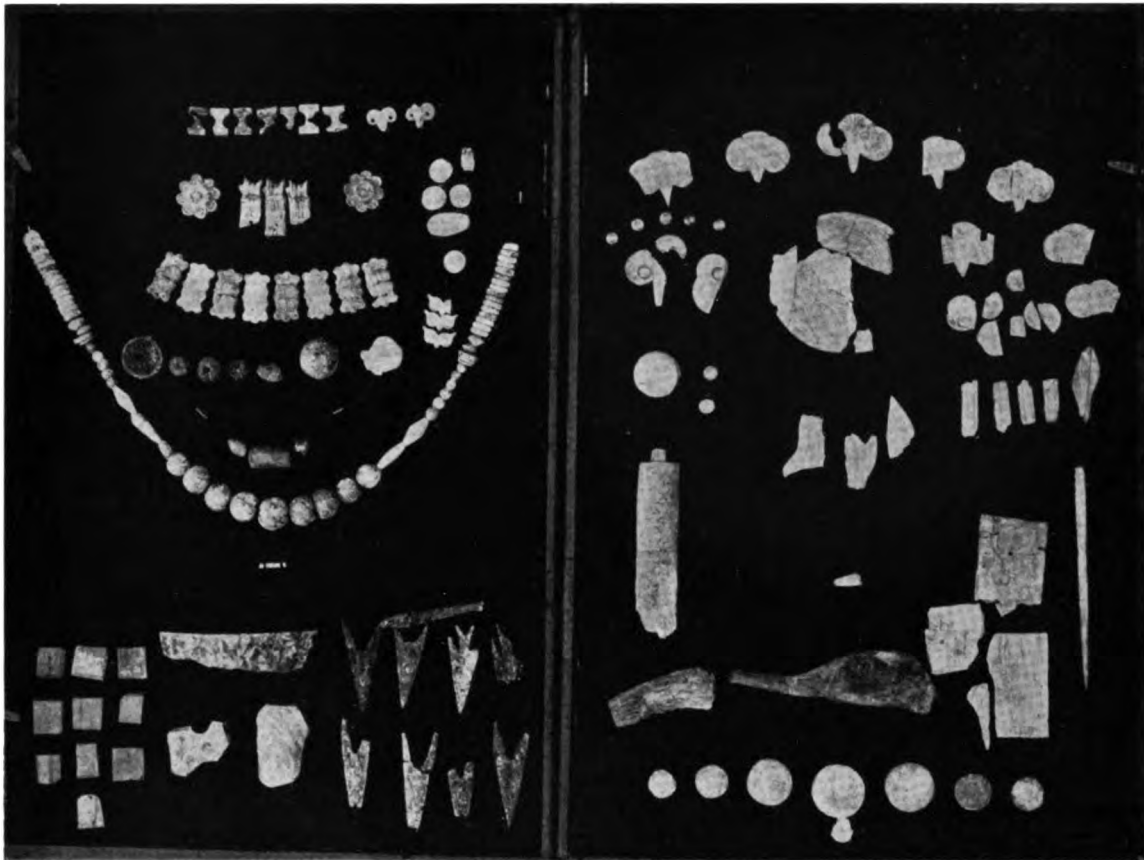


Fig. 252. Various minor objects from Chamber-tomb 1:2.

9. Eighteen worked pieces of boar's tusks of varying sizes (fig. 252), most of them poorly preserved, and fragments of some others. Greatest length preserved 0.075 m, br. 0.025 m. These were found both in the chamber and in the dromos.

10. A short, hollowed-out horn handle (fig. 252); l. 0.05 m, br. 0.02 m.

**Glass paste (fig. 252).**

1. Two large rosettes; d. 0.024 m. Exactly the same shape as the large gold rosettes of the large necklace of the princess at Dendra.<sup>1</sup>

2. Eight large beads showing a double argonaut design with three arms on each side and with two parallel threading-holes.<sup>2</sup> H. 0.012 m, br. 0.024 m. One was found in the doorway, the others in the chamber, five of them in the pit itself.

3. Seven beads in the shape of a Mycenaean altar.<sup>3</sup> H. 0.015 m, br. 0.012 m.

4. Three curled leaf ornaments,<sup>4</sup> broken off. The largest 0.03 m, br. 0.012 m.

<sup>1</sup> Cf. Persson, *The Royal Tombs at Dendra*, p. 40.

<sup>2</sup> Similar gold beads from Pit-Grave No. 7, cf. Evans, *Prehistoric Tombs of Knossos*, *Archaeologia* LIX, pp. 416, 520.

<sup>3</sup> Similar gold beads from the tholos-tomb at Dendra, cf. Persson, *The Royal Tombs at Dendra*, p. 29.

<sup>4</sup> Cf. *The Royal Tombs at Dendra*, p. 85.

5. Three flower-buds with petals elongated to a point at the top, without any stamens. H. 0.008 m, br. 0.012 m. Two from the dromos, one from the chamber.

6. Two lily-shaped beads, like the eyes in a combination of hooks and eyes.<sup>1</sup> H. 0.012 m, br. 0.014 m.

7. One conical bead with plastic spiral from base to top. H. 0.02 m, br. 0.02 m. From the pit in the chamber.

8. Eight button-like beads; d. 0.01 m.

9. Nine large, round beads of different diameters; 0.017—0.012 m. Five from the pit.

10. Eleven small, round, ribbed beads; d. 0.005—0.002 m.

11. Five ribbed, conical beads; h. 0.005—0.002 m, d. 0.008—0.005 m.

12. Thirty-three flat beads, ribbed at the edge; d. 0.008—0.006 m. Thirteen from the pit.

13. Two ribbed beads shaped like grains of wheat; l. 0.014 m, br. 0.006 m.

14. One tubular, ribbed bead; l. 0.015 m, br. 0.004 m.

15. One drop-shaped bead; l. 0.018 m, br. 0.006 m.

16. Six very small beads; d. 0.002 m.

#### Semi-precious stone, amber, steatite (fig. 252)

1. One tubular bead of agate; l. 0.015 m, d. 0.01 m.

2. One tubular bead of agate; l. 0.01 m, d. 0.01 m.

3. One carinated bead of agate; l. 0.01 m, d. 0.006 m.

4. Nine small hemispheres of rock-crystal, d. 0.003 m, belonging to the ivory flower-buds No. 1.

5. One large and four small beads of amber; d. 0.025—0.01 m. The larger one is flat, the others flattened and globular.

6. One steatite button of the ordinary, conical type; h. 0.01 m, d. 0.015 m.

#### Bronze (fig. 252).

1. One bronze mirror; d. 0.12 m, th. 0.001 m. From the pit. Some remnants of fabric preserved in the verdigris.

2. A large number of arrow-heads have been found at different points in the chamber, most of them badly corroded. There are three different types:

A. Triangular shape with barbs meeting at an angle; l. 0.06—0.04 m.

B. Triangular shape with thin barbs and a barbed tang between them;<sup>2</sup> l. 0.05 m.

C. Solid, squarely hammered bronze rod with a swelling at one end hammered into a point; l. 0.06 m.

3. A large quantity of corroded, shapeless bits of bronze from the chamber and dromos.

<sup>1</sup> Cf. The Royal Tombs at Dendra, p. 105.

<sup>2</sup> For the types A and B, cf. The Royal Tombs at Dendra, p. 103; *Archaeologia*, LIX, p. 421 f.

In order to get an idea of the area over which the sherds were spread their position has been given from this tomb the most important in the necropolis. The vases cover the entire L. H. III period. In some places are found accumulations to which sherds and bones from older burials have been relegated, more or less carefully.

The latest accumulation was found near the inner wall facing the entrance to A 3, 4, where four still whole stirrup-vases were found, Nos. 16, 19 in A 3, Nos. 17, 18 in A 4, and also the bulk of the sherds from the vases Nos. 12, 10 (parts in the earth filling of the stomion) and 7 (parts in the dromos). Another accumulation was found



Fig. 253. Ivory lid from Chamber-tomb I: 2.

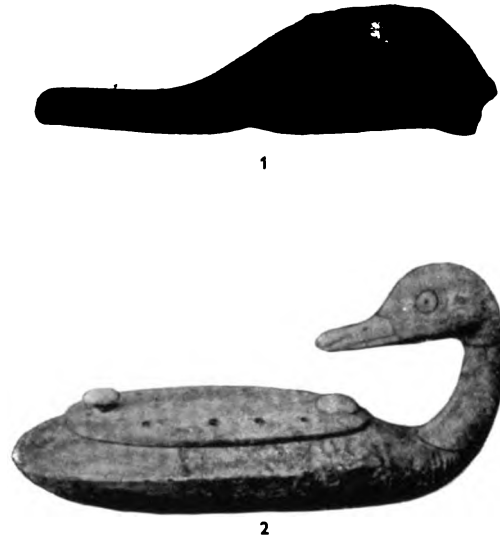


Fig. 254. Head of an ivory duck from Chamber-tomb I: 2 (1); below, a similar box from Ras Shamra (2).

in B 2, 3, C 3, 4, D 5 in an oblique line in front of the former, where, inter alia, the greater part of vase No. 5 was found. A third fairly large accumulation exists in D 2, 3; E 2, 3, containing inter alia the bulk of vases Nos. 6 (parts in the dromos), 8, etc. To the latest burial gifts belong vase No. 11, on the left, and Nos. 15, 48, on the right, inside the stomion.

#### CHAMBER - TOMB I: 3

*Chamber* — empty, probably because the ceiling above the entrance has fallen in.

##### *Niche in the dromos*

1. Jug (fig. 255: 1). H. 0.095, d. 0.085 m. Flattened, globular body with flat base and short, cylindrical neck, and round loop handle from the lip to the belly. Yellow clay; reddish-brown varnish. On the shoulder are some detached spirals whose ends first rise and then descend in sharp loops. The body is encircled by three bands; other bands over the painted foot and below the neck. The lip and handle are painted.



2. Jug (fig. 255: 2). H. 0.07 m, d. 0.08 m. Flat, globular body with slightly raised foot and cylindrical neck with lip cut away behind; a round loop handle. Yellow clay; dullblack varnish. Below the shoulder is a solid wave, and from this rise stylised



Fig. 255. Pottery from Chamber-tomb I: 3.

plants, a heart-shaped leaf on a double, wavy stalk. From the base of the leaf sprouts another curved stalk with three small leaves, one at the top, two placed pairwise immediately below. The body is encircled. The neck, handle, and foot are black.

3. Saucer. H. 0.02 m, d. 0.085 m. Shallow shape with raised foot and high, flat loop handle. Black clay; undecorated.

4. Glass-paste. Globular bead; d. 0.016 m.

#### CHAMBER - TOMB I: 4

*Chamber* — absent, because the hard limestone crops out here.

#### *Niche in the dromos*

Stirrup-vase (fig. 256). H. 0.175 m, d. 0.16 m. Globular body with flat base. Yellow clay; dull black varnish. Within the handle-zone opposite the spout, are two conventional flowers facing one another, composed of triple chevrons closed with three solid arcs and one arc of dots with inner part solid; curling stalks. Between the flowers is a group of concentric circles with a solid centre and a row of dashes from the false neck to the top of the circles. On either side of the spout are triangles enclosing pairs of similar circle ornaments at the bases, and with solid tops. On the body, between thick and thin lines, is a chain of flowers containing some still more stylised flowers placed on edge, these being composed of one or two outlines with a solid inner part.<sup>1</sup> A loop connects the base of the false neck and the spout. On the top of the false neck is a spiral with a solid eye. The foot, handle, and spout are edged with paint.



Fig. 256. Pottery from Chamber-tomb I: 4.

<sup>1</sup> It is quite clear that we have here a transposition of a string of flower-shaped beads, joined together from the bottom of the flower to the middle of the crown, as a decorative pattern. Cf. Evans, *Palace of Minos* 1, p. 269.

## CHAMBER TOMB I: 5

*Bronzes, found in the pit in the chamber (fig. 257)*

1. Hydria. H. 0.52 m, d. 0.39 m. From the rounded shoulder the sides taper straight to the foot which spreads in a roll. The cylindrical neck is short and has a wide, projecting rim. There are two handles, one attached vertically to the rim and shoulder, the other set horizontally on the lower part of the body. Apart from the neck and



Fig. 257. Bronze vessels from Chamber-tomb I: 5.

foot, which latter is unusually thick, the vase is made in two separate, overlapping sections, joined together by small rivets.<sup>1</sup> Undecorated.

2. Jug (fig. 258). H. 0.17 m, d. 0.13 m. Below the rounded shoulder the body narrows in a hollow curve to the flattened base; cylindrical neck with wide, projecting rim, vertical, angular handle attached with two rivets to the rim and one at the shoulder. Round the shoulder is a stout bronze ring decorated like the handle, with rounded leaves with double outlines sprouting on each side of a twig. This pattern already occurs on Middle Minoan III pottery, cf. a cup from the Gulf of Mirabello,<sup>2</sup> and there represents a highly developed stage of a decorative motive, which can be traced back to Middle Minoan I A.<sup>3</sup> The pattern must be considered as a naturalistic variant of the herring-bone pattern later so common.

3. Jug (fig. 259). H. 0.14 m, d. 0.10 m. Shape as last but with taller body and wider neck. Undecorated. This jug contained the jewellery, cf. below.

<sup>1</sup> Cf. for the bronzes Persson, *The Royal Tombs at Dendra*, p. 92 ff.

<sup>2</sup> B. M. Catalogue I, 1, p. 95, A 572.

<sup>3</sup> Cf. Evans, *Palace of Minos I*, p. 269 f.

4. Tripod cauldron. H. 0.35 m, d. 0.32 m. Hemispherical body with three feet and two loop handles set vertically on the rim and sides of the bowl. Damaged by fire.

5. Basin with two handles. H. 0.05 m, with handles 0.07 m, d. 0.36 m. Vertical sides; angular handles rising vertically from the rim. The rim is broad and massive, and is decorated like the handles with a raised trellis pattern reminding one of plaited leather.<sup>1</sup>

6. One-handed basin. H. 0.045 m, with handle 0.09 m, d. 0.205 m. Shallow bowl with curved sides and broad massive rim as well as a massive ring-shaped handle rising from the rim. Rim and handle decorated with the same foliate ornament as



Fig. 258. Bronze jug from Chamber-tomb I: 5.



Fig. 259. Bronze jug from Chamber-tomb I: 5.

No. 2 above. On the handle is a stem or twig in relief from which leaves spring on either side. Exactly the same decoration occurs on an identical basin from the Palace hoard of bronzes at Knossos.<sup>2</sup>

7. Spreading open bowl. H. 0.137 m, d. 0.195 m. Conical body with concave sides narrowing in a hollow curve to the flattened base, horizontal wish-bone handles with knobbed, vertical projections.<sup>3</sup> On one side is a flat spout. Undecorated.

8. Small bronze vessel. H. 0.02 m, with handle 0.09 m, d. 0.10 m. Lamp (?) in the shape of a pan with broad rim and with solid handle sloping upwards.<sup>4</sup> Undecorated.

#### Pottery

1. Hydria (fig. 260: 1). H. 0.355 m, d. 0.29 m. Globular body with low foot and cylindrical neck; the mouth curves outwards and upwards; one flat loop handle vertically from shoulder to rim, and two slanting loop handles set horizontally on

<sup>1</sup> Cf. *Archaeologia* LIX, p. 429.

<sup>2</sup> Cf. Evans, *Palace of Minos* II, p. 637 ff.

<sup>3</sup> Cf. *The Royal Tombs at Dendra*, p. 94, fig. 68.

<sup>4</sup> Cf. *The Royal Tombs at Dendra*, p. 95.

the body, all of them pierced to bring about better firing. Coarse, red clay, covered with greyish-yellow slip; brownish-black varnish. On the shoulder and body are three resp. two bands, below the neck one band. The horizontal handles and the lip have lines; the vertical handle has a wavy line and a curl below. On either side of the horizontal handles are some plain strokes. Inside the mouth there is a band.

2. Jug (fig. 260: 2). H. 0.30 m, d. 0.23 m. Shape, clay, and decoration as last but without horizontal handles. On the shoulder and body are three, resp. one plain band.

3. Stirrup-vase (fig. 260: 3). H. 0.285 m, d. 0.28 m. Globular body with narrow neck and spout. Yellow clay with brilliant blackish-brown varnish. Very fine fabric. Decoration in »close style».<sup>1</sup> Within the handle-zone are lattice-filled lozenges with one or two spirals at the angles, and large and small triangles filled with scale-pattern, all the geometric figures having slightly incurved sides. The shoulder and body are also ringed with four narrow bands of zig-zags and one of running spirals between plain lines, except on the lower part of the shoulder, where there is a broad band containing groups of concentric semicircles attached alternately to the upper and lower borders. On the top of the false neck is a flower with eight petals, with a solid interior doubly outlined and surrounded by a circle. The handles are crossed by two, broad diagonal bands, as is customary on Geometric pottery.

4. Stirrup-vase. H. 0.23 m, d. 0.19 m. Globular body with high neck and spout. Greyish clay; black varnish, mostly worn off. The design is indistinct. Within the handle-zone, opposite the spout, is one large triangle with scale-pattern and conventionalized flowers of the lily type, with arched inner lines and dotted outlines; between the handles and the shoulder is a band of two groups of concentric semicircles on each side of the spout conventionalized flower-buds in the shape ordinary for gold and glass-paste beads, and concentric semicircles. On the body: narrow band of zig-zags, broader band of chevrons, broad band containing groups of concentric semicircles terminating in groups of dots, attached alternately to the upper and the lower border, then a narrow band of chevrons, a narrow band of concentric semicircles, and a narrow band of linked arcs. A loop connects the bases of the false neck and spout. The decoration of the handle consists of chevrons, that of the top of a flower with four plain petals with double outlines.

5. Stirrup-vase (fig. 260: 4). H. 0.205 m, d. 0.19 m. Globular shape. Lightyellow clay; dullbrown varnish. Within the handle zone, opposite the spout, is a conventionalized floral (?) design springing from the base of the false neck, and composed of two spirals with half-filled eyes, connected horizontally by a series of chevrons. Between the coils, and attached to the enclosing band, are three concentric semicircles, only the outermost of these being dotted, while the innermost is plain except for two small semicircles side by side. On either side of the spout is a lozenge with double outlines, with solid angles, and a circle in the middle; there are loops from

<sup>1</sup> Cf. Forsdyke, in *B. M. Catalogue I*, 1, p. 207.



opposite corners. On the body are two bands of zig-zag pattern close together, and below broad, plain bands. A loop connects the bases of the false neck and spout. The handles and spout are edged with paint. The top of the false neck has a central cone, and is decorated with a spiral.

6. Stirrup-vase. H. 0.165 m, d. 0.146 m. Globular shape. Greyish clay; dull brownish-black varnish. Within the handle-zone, opposite the spout, are various ornaments, a conventionalized flower, groups of parallel loops and chevrons, two of which are connected by parallel bars, the innermost being filled in. On one side of the spout is a similar group, on the other a lattice-filled triangle. On the body are thin and broad bands. A loop connects the bases of the false neck and spout; the handles are crossed with lines and the spout is edged with paint. On top of the false neck is a spiral.

7. Stirrup-vase. H. 0.14 m, d. 0.11 m. Globular body on high ring foot. Pale-yellow clay; dull, brownish-red varnish. Within the handle-zone, on each side of the spout, is a fluted shell, on the opposite side of the spout are two similar shells, connected by lines with the base of the false neck and the enclosing hand on the shoulder; the area thus obtained is filled with dashes and dots. On the shoulder is a narrow band containing groups of vertical strokes; the body is encircled by thick and thin bands. There is a loop round the bases of the false neck and spout. The spout is bordered with paint; the foot and handles are black. The top of the false neck has a central cone, and is decorated with a spiral with a central disc. The underside of the foot is decorated with a spiral.

8. Stirrup-vase. H. 0.125 m, d. 0.10 m. The body is an elongated globe on a high ring foot. Pale, yellow clay; dull, reddish-brown-black varnish. Within the handle-zone are different groups of parallel loops outlined by a row of dots. On the body are broad and narrow bands, the lower part is undecorated. A loop connects the bases of the false neck and spout; the spout handles are bordered with paint. On top of the false neck is a spiral.

9. Stirrup-vase. H. 0.95 m, d. 0.185 m. Globular shape. Pale-yellow clay; dull, brownish-black varnish, mostly worn off, so that the design is indistinct, but is evidently like No. 8. On the body are broad and narrow bands. There is a spiral on the top of the false neck.

10. Jug (fig. 260: 7). H. 0.26 m, d. 0.195 m. Rounded body with cylindrical neck; the mouth turns outwards and upwards in a hollow curve; one loop handle vertically from shoulder to rim. Coarse clay covered with light-greyish slip; brown varnish. Below the neck is one band, on the shoulder are three, and between those on the shoulder, opposite the handle, are two opposing arcs, touching each other. On the lower part of the body is one band, a line runs down the handle terminating in a curl on the body of the vase; the lip is edged with paint, below it is a band.

11. Stemmed goblet. H. 0.165 m, with handle 0.247 m, d. 0.125 m. Deep, globular



Fig. 260. Pottery from Chamber-tomb I: 5.

body with offset rim on high, solid stem, with domed foot. One high, flat loop handle. Light red polished clay. Undecorated.

12. Open bowl (fig. 260: 5). H. 0.085 m, d. 0.105 m. Rim slightly out-turned and with a ring foot. Two slanting loop handles set horizontally on the broadest part of the body. Greenish-yellow clay; brownish-black varnish. Broad, plain bands on the body and rim. The handles and inside of the bowl are covered with paint.

13. Cup (fig. 260: 6). H. 0.085 m, d. 0.153 m. Shallow, open bowl with curved sides and slightly out-curved lip. One vertical loop handle. Yellow clay; brownish-red varnish. Below the rim is a plain band. The handle has bars. Inside, on the lip and on the lower part of the body, are plain bands. There is a spiral on the bottom inside the vase.

*From the niche in the dromos* (fig. 260: 8).

14. Amphora. H. 0.36 m, d. 0.27 m. Globular body with raised foot and tall, cylindrical neck turned out to form a flat rim; two horizontal loop handles slanting upwards set on the broadest part of the body. Greyish clay with lightgrey slip; brown varnish. On the shoulder, below the neck, three thin bands, then on each side two plastic knobs surrounded by circles, then three plain bands. Between the handles on each side a wavy line; the lower part of the body is encircled by two bands. The neck is encircled and the handles are painted black. From the base of each handle is a loop of paint. The handles are pierced at the point of attachment.

15. Open bowl. H. 0.165 m, d. 0.205 m. Deep open bowl with ring foot and slightly out-turned rim; two slanting loop handles set horizontally on the middle of the upper, vertical part of the side. Pale-yellow clay; brownish-black varnish. Between the handles on either side are three linked spirals between enclosing bands, the inner one black. The handles are painted with dashes.

16. Cup. H. 0.095, d. 0.155 m. Wide mouth and narrow ring foot; sides sloping gently from base, sharply from lip, and meeting at an angle. Profile of upper part slightly concave. One high, flat loop handle. Paleyellow clay; brownish-black varnish. The upper part is filled with groups of intersecting parallel arcs, springing alternately from below and above. Lower part and inside black. The handle has bars, the rim is dotted.

*Dromos* (three sherds in the chamber).

17. Two-handled jar. H. 0.195 m, d. 0.17 m. Globular body with wide, cylindrical neck and two flat, vertical loop handles, joining the lip and shoulder. Greenish-yellow clay; undecorated.

#### *Miscellaneous finds*

In the bronze jug, No. 3, were found some beads of different shapes. The verdigris from the vase had partly preserved the threads, and a large part of the original ornaments had been made to adhere to the walls of the vase through the verdigris, so that it was found possible to reconstruct them with absolute certainty.



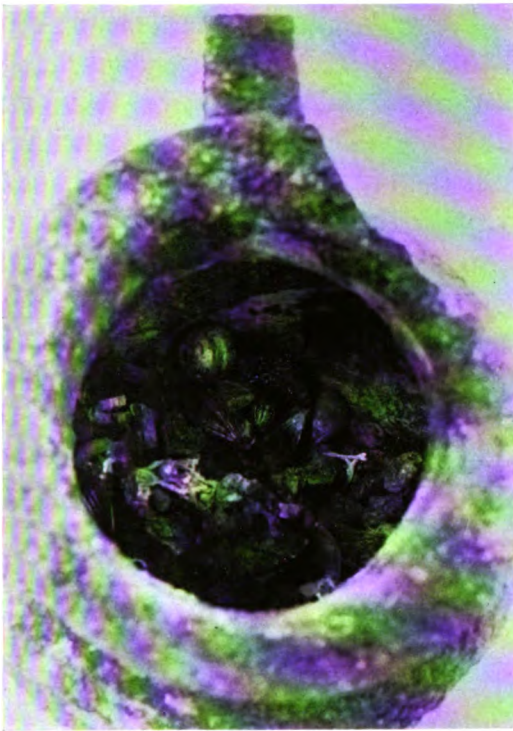
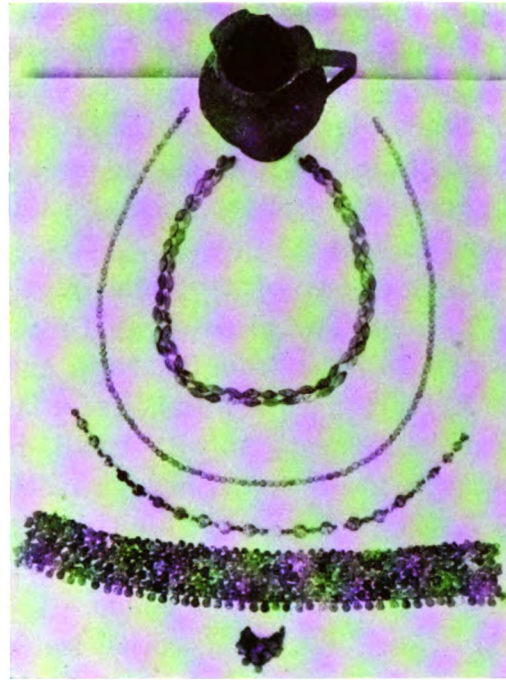
Fig. 261. Bronze jug with gold-beads *in situ*.

Fig. 262. Bronze jug with its contents.

1. Necklace of small gold rosettes; 154 pieces, each rosette d. 0.007 m. Each rosette, which has two parallel threading-holes, is made of two pieces of gold joined together, the upper one showing a *repoussé* flower (Cf. Tomb I: 1, Gold No. 8; p. 372). The total length of the necklace is about 0.93 m.

2. Necklace of gold and glass-paste beads, ribbed and shaped like dates; 38 pieces of gold, 41 of glass-paste. Each bead l. 0.018—0.014 m, br. 0.007—0.005 m. The gold beads are made from only one piece of gold. The beads had been arranged in two rows in such a way that two gold beads are always succeeded by two beads of glass-paste, but alternating in the two rows; two gold beads in the outer row thus correspond with two beads of glass-paste in the inner one, and vice versa. The total length of the necklace is about 0.60 m.

3. Necklace of round beads of gold and glass of different sizes: 40 small gold beads, each 0.002 m; 20 large glass beads, each one 0.012 m; 20 small glass beads, each one d. 0.005 m. To this has to be added a clasp-bead of gold, consisting of three grains of gold soldered together and one of glass, and a round button with curved sides. The beads were arranged in the following way: large glass bead, small gold bead, small glass bead, small gold bead, large glass bead, and so on. The total length of the necklace is about 0.46 m.



4. Head ornament, diadem or tiara, made of different kinds of glass-paste; 235 heart-shaped ones, with ivy leaf ornament, provided with double threading-holes, each one l. 0.01 m, br. 0.01 m; 44 pendant spirals, each one l. 0.012 m, br. 0.006 m; 42 smaller round beads, d. 0.004 m. To these must be added an undissolved lump of beads which illustrate the original composition of the ornament. The heart-shaped beads form five rows joining each other obliquely, with the pendant spirals attached to the bottom of the openings; the round beads were placed at the top. Estimated length about 0.50 m.

*On the floor of the chamber.*

1. Gold. Two pieces of gold rosettes; one of a pendant spiral; a piece of gold leaf which, to judge from its shape, once covered a ring, l. 0.045 m.

2. Ivory. Plaque with holes for fastening; h. 0.03 m, br. 0.03 m. The left edge showed leaf-shaped pattern with small, horizontal dashes. From the upper edge issues a returning spiral band in high relief.

3. Ivory. Rosette with eight petals; d. 0.017 m.

4. Ivory. Pendant spiral; h. 0.012 m, br. 0.03 m. Banded decoration over the upper edge with the threading-hole.

5. Glass-paste. One curled leaf ornament; h. 0.03 m, br. 0.011 m. Fragment of another.

6. Glass-paste. One cylindrical, ribbed bead; l. 0.014 m, br. 0.004 m.

7. Shapeless piece of bronze.

The contents of this tomb are, as far as the vases are concerned, remarkably homogeneous. We may, however, have to allow for two or perhaps three burials. I In the pit with its contents, II a closed group in the southern part of the chamber, to the left of the entrance, and possibly III, opposite the entrance, with the head outwards.

To burial I belong all the bronze vases, and clay vases Nos. 2, 7, and 13; to burial II the vases 1, 3, 4, 8, 9, 10, and to III Nos. 5, 6, and 12.

CHAMBER - TOMB I: 6

*Pottery*

1. Jug (263: 1). H. 0.15 m, d. 0.12 m. Globular body with ring foot, cylindrical neck with pinched-out spout (nearly trefoil lip), and loop handle from mouth to shoulder. Greyish-yellow clay; dull, brownish-black varnish. On the shoulder, below the spout, two opposing spirals sprout from the base of the neck; on either side a fringe of short, broad strokes suspended from the neck like a necklace. On the body are broad and narrow bands; the handle is barred. The lip is bordered and there is a band inside the lip.

2. Three-handled jar. H. 0.18 m, d. 0.145 m, d. of mouth 0.106 m. The shoulder has a rounded curve and the body narrows in a hollow curve to the projecting foot. The

wide neck, which rises gently from the shoulder, is short and has a wide, projecting rim. Lightgreenish surface; brownish-black varnish. The shoulder band is no wider than the handles; between each pair of handles are three groups of parallel strokes. On the body are plain bands; the handles are edged with paint; the foot and neck are painted.

3. Two-handled jug. H. 0.295 m, d. 0.18 m. Sherds both in the chamber and in the dromos. Piriform body, narrowing sharply below the rounded shoulder to the roll-moulding of the foot; raised ring at the base of the high neck; long, narrow beak-spout and two flat loop handles set obliquely backward and running from the rim to the flattened shoulder. Reddish-yellow clay; red varnish. Below the neck is a band



Fig. 263. Pottery from Chamber-tomb 1: 6.

composed of hatched geometric figures, on the shoulder is a band with conventional lily-like flowers springing to the left; two arcs made of short dashes serve as petals. The rest of the shoulders and body are surrounded by broad and thin plain bands. The neck and spout are encircled with plain bands, between are two rows of triangles with the points upwards. The foot and handles are red.

4. Stirrup-vase (fig. 263: 2). H. 0.245 m, d. 0.23 m. Globular body with unusually small spout and handles. Reddish clay with yellow surface and reddish-brown varnish. No separation of shoulder and body. The decoration consists of a large cuttlefish set vertically below the spout, with the eyes represented by filled circles, and with fringed tentacles. On the shoulder, on either side of the spout, are three short tentacles with a fringe of short rays outlining the silhouette, each tentacle terminating in a spiral, springing from the bases of the tentacles on a height with the eyes on each side from something resembling a fluttering mantle or cloak, whose outer edge is bordered by five linked spirals. Below the eyes appear two long tentacles, which sweep round to the back of the vase in large loops and there turn up towards the stirrup and terminate, not in a spiral, but in round discs with double outlines, which are filled with four times repeated groups of concentric semicircles placed on the inside line.

Between these tentacles, opposite the spout, another, quite differently stylised, cuttle fish. There cannot, however, be any question here of a »much debased type of the realistic devil-fish«, which we meet in stylised form on the other side — Blegen makes a mistake when he says that ornaments of this kind are a kind of degeneration of the octopus design.<sup>1</sup> The drawing given by Blegen, *Zygouries*, fig. 137, and the representation on our vase, are not derived from the octopus but from quite another species of cuttlefish, *Loligo* (fig. 264), which has an elongated, conical shell and ten rather short tentacles. The conventional variation reproduced on our vase belongs undoubtedly to the most advanced stage which with any certainty could be considered here. On the Asine vase it has the some short, pendant arms or tentacles of equal

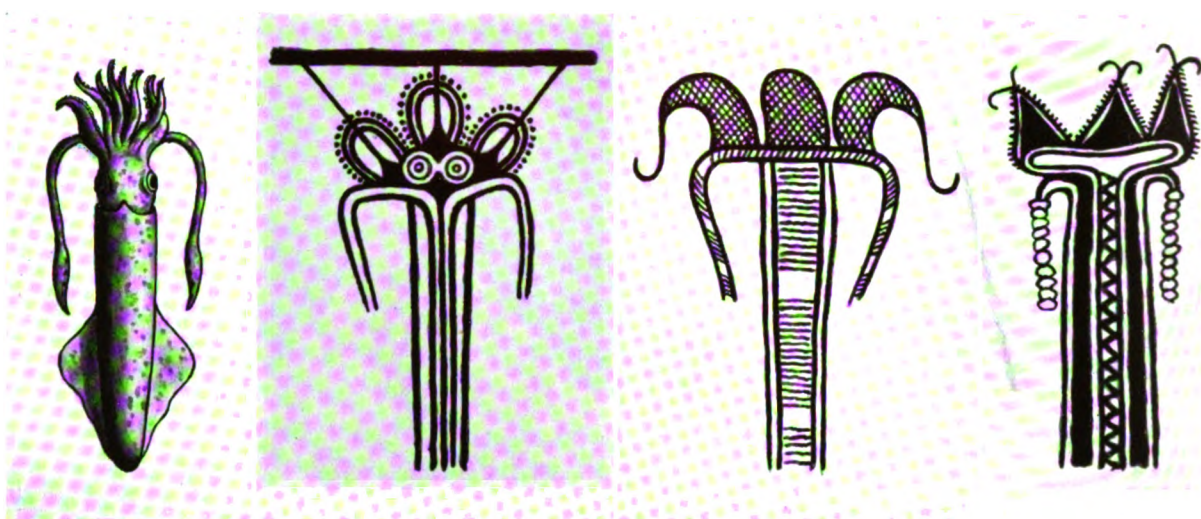


Fig. 264. *Loligo* and *Loligo*-patterns on L. H. pottery.

width as Blegen's types 1—3, formed of ovals touching one another — moreover, like Blegen's types 4—7, for the upper tentacles substituted »a formal tripartite pattern«, not however by concentric semicircles or arcs but by plain triangles with double outlines, the outermost fringed, and a small, slack, curved line at the top. The eyes have been flattened out into oval, open spaces like Blegen's type 8. The body on our vase consists of two parallel, plain bands with double outlines; they are connected with another by a zig-zag pattern.<sup>2</sup> It is continued right down to the foot where it is bordered on both sides by triangles with arcs and dots in each angle; fourfold lines, the outermost dotted; in the upper apex connected with a shell-motive.

The handles and neck are decorated in typical »close style«. The handle has a decorative band, composed of a zig-zag between plain lines, which curves down both

<sup>1</sup> Blegen, *Zygouries*, p. 146.

<sup>2</sup> This variation of a cuttle-fish makes it extremely probable that on Pl. XVIII in Blegen, *Zygouries*, another such is represented, not a palm tree, as Blegen says, p. 147.

sides of the shoulder, filling the wide space between the representations below the spout and on the opposite side. On the shoulder, this band is enclosed within a band of small arcs, which appear on the handle itself with the curves turned inwards, so as to appear on the inside of the marginal line. The top of the false neck, which has a plain, conical centre, and two concentric circles at the border, is decorated with two different patterns alternating five times with each other, firstly one composed of opposing concentric semicircles connected at the top by lines, the outer one carrying a pair of smaller semicircles and secondly a triangular piece of scale-pattern. There is a loop round the bases of the false neck and spout. The foot is encircled by six bands.

5. Stirrup-vase (fig. 265: 1). H. 0.21 m, d. 0.175 m. Rounded type with high neck and spout; airvent. Greenish-grey clay, yellow surface; brown varnish. Within the handle-zone, opposite the spout, are two triangles, one with a simple, the other with a double, line rising from the apex; each of them is filled with two groups of concentric semicircles with solid half-disc centres, and with chevrons. On each side of the spout is a figure composed of triangles inscribed one within the other, the innermost in solid paint. Opposite the handle, on one side, are two, similar smaller triangles; on the other side a group of concentric semicircles. The whole is bordered by a narrow band of zig-zags between thin lines, then broad and narrow plain bands. The lower part of the body is unpainted. A loop connects the bases of the false neck and spout; the handles and mouth are edged with paint. On top of the false neck is a rosette composed of seven petals with solid centres.

6. Stirrup-vase (fig. 265: 2). H. 0.195 m, d. 0.17 m. Rounded body with high neck and spout. Light yellow clay; black varnish. Within the handle-zone, opposite the spout two triangles, one filled with hatched lines and the other with groups of concentric arcs bordering a solid angle. On each side of the spout concentric circles composed of alternately dotted and plain lines with solid centre. Below this comes a narrow band of zig-zags between thin lines, and there is a similar band lower down. The rest of the body is encircled by broad and narrow lines; the foot is unpainted. A loop connects the bases of the false neck and spout; the handles and mouth are edged with paint. The decoration of the top of the false neck is a spiral.

7. Stirrup-vase. H. 0.155 m, d. 0.14 m. Globular, slightly flattened body. Greyish-green clay; black varnish. Within the handle-zone, opposite the spout, two conventional flowers with double outlines and solid inner angles, facing one another; below the flowers are small triangles filled with scale-pattern, and between them a group of two concentric triangles, the smaller one in solid paint. On each side of the spout are two triangles filled with scale-pattern. The body is encircled by broad and narrow plain bands. A loop runs round the bases of the false neck and spout; the mouth and handles are edged with black. On the raised top of the false neck is a spiral with a solid centre.



8. Stirrup-vase. H. 0.14 m, d. 0.15 m. Flattened, globular shape and yellow surface; reddish-black varnish. Within the handle-zone are five ornaments, each composed of five parallel chevrons cut off and joined together on one side, with small circles below the neck. Broad and narrow lines on the body; on top of the false neck is a plain disc; the handle and false neck are edged with point. The false neck has a moulding at the base. There are circles at the bases of the false neck and spout.

9. Stirrup-vase (265: 3). H. 0.12 m, d. 0.10 m. Rounded body. Yellow clay; reddish-brown varnish. Within the handle-zone, opposite the spout are two conventional flowers with triple outlines; between the inner lines, at the top of the flower, are some short, radiating strokes. In the interior of the flower are two groups of loops inscribed one within the other, the smaller being solid. Between the flowers are two similar groups of loops, and between these, from the border to the base of the false neck, a row of parallel dashes increasing in size. On each side of the spout are two triangles with triple outlines, filled with concentric arcs at the lateral angles, enclosing a solid space in the middle. The body is encircled by broad and narrow bands. A round loop runs round the bases of the false neck and spout; the mouth is edged with paint; the handles are edged and banded with black. On top of the false neck is a spiral.

10. Stirrup-vase. H. 0.115 m, d. 0.10 m. Rounded shape. Pale yellow clay; dull, blackish-brown varnish. Within the handle zone are four conventional flowers with curling stalks, placed in pairs facing each other. On the body are broad and narrow bands. The bases of the false neck and spout are connected by a loop. The spout is edged with paint; the handles are black. On top of the raised, false neck is a spiral with a plain eye.

11. Stirrup-vase. H. 0.11 m, d. 0.095 m. Globular, slightly flattened body. Greyish-yellow clay, brown varnish. Within the handle-zone, opposite the spout, are groups of long parallel loops bordered by a row of dots; on each side of the spout are cross-hatched triangles. The body has broad and narrow bands. A loop runs round the bases of the false neck and spout. The mouth and handles are edged with paint. On the raised top of the false neck are some concentric circles, the innermost filled in.

12. Jug (fig. 265: 4). H. 0.085 m, d. 0.075 m. Globular, flattened body with ring foot; cylindrical neck with pinched-out spout and loop handle from mouth to shoulder. Greyish-yellow clay; dull varnish, mostly worn off. On the shoulder are some short strokes radiating from the neck. The body and neck are encircled.

13. Stemmed goblet (fig. 265: 5). H. 0.13 m, d. 0.13 m. Deep, tapering bowl with offset rim on short stem with disc-foot; two small, vertical loop handles issuing horizontally from the rim. Pale yellow clay; undecorated.

14. Conical bowl (fig. 265: 6). H. 0.22 m, d. 0.44 m. Wide mouth and narrow base, concave tapering sides and flattened rim; two round loop handles set horizontally on the upper part of the sides. Pale yellow clay; dull, brownish-black varnish. Below the rim and on the lower part of the body, on the outside, groups of broad and thin

bands, the inside altogether black, except the bottom, which has a spiral in the middle and round the very edge two concentric circles. The handles are barred and their bases surrounded with a thick line. The upper surface of the rim has two-thirds of its length covered with groups of parallel loops attached alternately to the outer and inner borders, the remaining one-third has the same motive on a smaller scale, but with the loops placed opposite one another on the inner and outer edge. Here



Fig. 265. Pottery from Chamber-tomb I: 6.

a kind of red-figure technique has been employed in that the loops themselves have been reserved in the otherwise wholly black surface.

15. Amphora. H. 0.205 m, d. 0.19 m. Globular body with ring foot, high neck with out-turned lip; two small loop handles with their bases set horizontally and the loops slanting upwards. Greenish-yellow clay; brownish-black varnish. On the shoulder is a cross-hatched, broad band bordered at the top by a zig-zag band; at the shoulder-level is a broad, wavy line; on the body are very broad bands. The neck is blackened inside and out, with dashes on the lip. The handles are hatched.

16. Amphoriskos. H. 0.098 m, d. 0.105 m. Shape as last. Greyish clay; black varnish. In the shoulder-band are groups of vertical lines; then three narrow bands. The neck is black inside and out, the handles are painted.

17. Amphoriskos. H. 0.08 m, d. 0.08 m. Globular, flattened body with narrow neck and two small loop handles. Light yellow clay; black varnish. On the outside one band, on the inside two. The rim is dotted. Yellow clay.

18. Bowl. H. 0.07 m, d. 0.13 m. Wide mouth and narrow foot, the sides forming a hollow curve. Two horizontal loop handles below the rim. On the outside one band, on the inside two. The rim is dotted. Yellow clay.

*Miscellaneous finds (fig. 266)*

**Gold.**

1. Two beads shaped like grains of wheat; l. 0.006 m, br. 0.002 m.
2. One bead of four gold grains, soldered together; br. 0.006 m.



Fig. 266. Miscellaneous objects from Chamber-tomb I: 6.

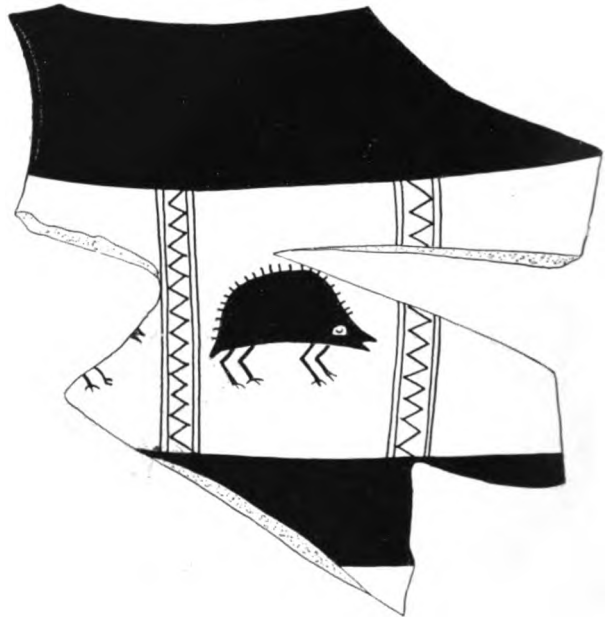


Fig. 267. Hedgehog painted on a sherd from Chamber-tomb I: 6.

3. One lily-shaped bead, like the eye of a hook and eye; h. 0.01 m, br. 0.01 m.
4. Nine beads representing buds or possibly shells; l. 0.008 m, br. 0.01 m.
5. Four thin rosettes with flower petals *en repoussé* and with holes for fastening at the edge; two larger ones, d. 0.03 m, two smaller ones, d. 0.012 m; fragments of another.

**Glass-paste.**

1. Two lily-shaped beads, like the eyes for hooks and eyes; h. 0.007 m, br. 0.008 m.
2. Three beads, amygdaloid with ribs along the edges and lengthwise down the centre; l. 0.018—0.015 m, br. 0.01 m.
3. Four beads like the gold rosettes of a necklace from Tomb I: 5; d. 0.007 m.
4. Thirty-one ribbed, flattened, globular beads, d. 0.01—0.007 m.

*Miscellaneous.*

Two steatite buttons of the ordinary, conical type and one shanked one; h. 0.012—0.009 m, d. 0.02—0.014 m.

In the niche of the dromos was found a small bead of terracotta representing a bull (?); l. 0.028 m.

Small fragment of faience.

Shapeless piece of bronze.

In the dromos fill were found, *inter alia*, Late Helladic sherds, also a piece of the rim of a panelled bowl with a hedgehog walking to the right (fig. 267). For the representation of the hedgehog on the famous stirrup-vase from Calymnos in the British Museum; cf. B. M. Catalogue I, 1, p. 191 ff. and the literature quoted there.

The pottery in this tomb was found along the sides of the chamber and does not permit of its being divided into groups.

## CHAMBER - TOMB I: 7

*Pottery*

1. Three-handled jar (fig. 268: 1). H. 0.36 m, d. 0.295 m. The shoulder is rounded and the body is strongly contracted in a hollow curve towards the spreading foot. The neck is cylindrical, with projecting rim; three flat loop handles are set vertically on the shoulder. Greyish-yellow clay; brownish-black varnish. In the shoulder-band, which is no wider than the handles, are one or two obliquely placed murex-shells between each pair of handles and a group of two crescents linked together. Above and below this band are groups of broad and narrow lines. The handles are painted and surrounded by broad strokes. The neck and the foot are black.

2. Three-handled jar (fig. 268: 2). H. 0.35 m, d. 0.26 m. Shape like the last. Pale greenish clay; brownish-black varnish, mostly worn off. No decoration in the shoulder-band and below the enclosing bands. The handles, which are surrounded by broad strokes, the foot, and the neck are black.

3. Three-handled jar (fig. 268: 3). H. 0.25 m, d. 0.19 m. Body like the last but taller and with wide short neck. Light reddish clay and greenish surface; brownish varnish. Decoration like the last.

4. Three-handled jar (fig. 268: 4). H. 0.215 m, d. 0.15 m. Tall shape; the straight sides taper evenly to the slightly pronounced foot; wide, short neck with broad projecting rim; vertical loop handles. Reddish yellow clay, greyish surface; brownish-black varnish. The broad shoulder-band is filled with a simple scale-pattern. Broad and narrow plain bands encircle the entire space between the shoulder and the foot; the handles, neck, and foot are black. On the horizontal rim is a hastily executed zig-zag.

5. Three-handled jar (fig. 268: 5). H. 0.175 m, d. 0.15 m. Shape like No. 3, but the loop handles set on horizontally. Reddish clay, yellow surface; brilliant, brownish-red





Fig. 268. Pottery from Chamber-tomb I: 7.

varnish. In the shoulder-band are wavy lines and below each handle is a group of three chevrons. Above and below are broad and narrow plain bands. The handles, neck, and foot are painted.

6. Amphora (fig. 268: 6). H. 0.45 m, d. 0.41 m. The body is rounded and slightly flattened with upright neck and mouth. The round loop handles are set horizontally on the broadest part of the body; they are pierced vertically at the point of insertion (to facilitate thorough firing). Greyish clay; dull, brownish-black varnish. On a level with the handles is a broad band, decorated with a wavy line, between the handles, below the neck, on each side, are two plastic knobs, pierced horizontally. The handle-band is bordered by three plain bands, and there is another on the lower part of the body, and a group of three below the neck. The handles and neck are painted black, the foot is unpainted.

7. Jug (fig. 268: 7). H. 0.265 m, d. 0.20 m. Rounded body with cylindrical neck and mouth curving outwards and upwards; a large, round loop handle from the shoulder to the top of the neck, pierced vertically at the top, horizontally at the base. Coarse, greyish-red clay; dull, reddish-black varnish. On the shoulder are three plain bands, below the neck one, and on the lower part of the body another. The handle has a wavy line which continues in a curl. The mouth is edged with paint and has a circle inside.

8. Jug (fig. 268: 8) H. 0.31 m, d. 0.265 m. The lower part of the body and the foot found in the dromos. The body is almost spherical, with a narrow neck, wide out-turned mouth, and no spout. There is a small, ribbed loop handle which joins the neck below the mouth. Reddish-yellow clay with yellow slip; brown varnish. On the shoulder, immediately below the neck, a band with linked spirals; below are three plain, broad bands, and lower down two more pairs. The neck has one band at the base and another below the mouth. The handle and lip are painted.

9. Jug (fig. 268: 9). H. 0.25 m, d. 0.20 m. Shape as last. Greyish clay; undecorated.

10. Jug (fig. 269: 1). H. 0.27 m, d. 0.21 m. Flattened, globular body, raised ring at the base of the high, narrow neck; lip cut away behind; thick, round loop handle set vertically from the lip to the shoulder and pierced vertically at the top, horizontally at the base. Reddish-yellow clay with polished surface; reddish-brown varnish. Three plain bands round the broadest part of the body, one round the base of the neck, and two more round the middle of the neck. The handle has bars; the foot and lip are painted.

11. Jug. H. 0.245 m, d. 0.205 m. Almost spherical body with flattened base and wide, cylindrical neck. Thick, round loop handle pierced vertically at the top, horizontally at the base. Greenish surface; undecorated.

12. Jug (fig. 269: 2). H. 0.10 m, d. 0.075 m. Flattened globular body with high ring foot, high, narrow neck, and flat, vertical loop handle from the shoulder, joining the neck below the round, out-turned mouth. Pale yellow clay; black varnish, partly

worn off. Round the shoulder are three groups of parallel loops, one consisting of three loops, the others having two. Round the body is a broad, plain band; a thin band below the neck. The handle is barred; the lip and foot are black.

13. Side-spouted jug with basket handle (fig. 269: 3). H. 0.195 m, d. 0.145 m. Globular body; narrow neck with ribbed loop handle arched across the splayed mouth; narrow, tubular spout slanting upwards from the shoulder. Pale yellow clay; black varnish, partly worn off. On the shoulder and upper part of the body, between two enclosing lines, is a row of single spirals, each one ending in a loop, between them, above and below, triangular filling ornaments. Round the neck is a row of plain circles.<sup>1</sup> The handle, lip, spout, and foot are black.

14. Side-spouted jug with basket handle (fig. 269: 4). H. 0.13 m, d. 0.09 m. Shape as last but flatter body and without a foot. Yellow, polished clay; brilliant brown varnish. On the shoulder, enclosed by broad lines, are four single spirals, each one terminating in a loop with double lines. On the spout are five lines running lengthwise. The borders of the handle, neck, and foot are painted. On the handle are bars between the edged lines.

15. Stirrup-vase (fig. 269: 5). H. 0.25 m, d. 0.20 m. Almost spherical body, very narrow spout. Pale yellow clay; dull, blackish-brown varnish. Within the handle-zone is a crowded composition of concentric arcs and parallel, horizontal lines, arranged in four triangles with double outlines and in the space below the handles. Below the handle-zone, a broad, plain line, a band filled with chevrons, two thin lines, a broad band with concentric semicircles, plain or dotted, and then between two broad, plain bands a band of zig-zags with the triangles above and below filled with oblique parallel lines in opposite directions. The bases of the false neck and spout are connected by a loop. On the conical top of the false neck is a rosette of four petals with triple outlines, the outermost line being dotted. On the handles are narrow, horizontal bands with oblique, parallel lines. Near the false neck is a small air-vent.

16. Stirrup-vase (fig. 269: 6). H. 0.265 m, d. 0.225 m. Rounded body, rather pointed below, small handles, and spout. Pale yellow clay; blackish-brown varnish. Within the handle-zone are four swelling ornaments with double outlines and a row of dots with two similar smaller ornaments at the base, composed each one of three loops, the other space being solid. The upper part of the body is encircled by plain lines, except for a band with zig-zags and another broad and solid one. The top of the false neck is encircled, and in the circle are four groups of parallel loops, each one composed of four or five loops. The false neck and spout are connected by a loop. On the handle are chevrons; the lip is edged with paint; the foot unpainted.

17. Stirrup-vase (fig. 269: 7). H. 0.24 m, d. 0.215 m. Shape as last, handles and spout unusually small. Light yellow clay; brownish-black varnish, partly worn off.

<sup>1</sup> It is interesting to note that not only the shape but also the decoration with plain circles or large dots already occurs in Early Helladic III, cf. Blegen, *Zygouries*, p. 104 and fig. 89.



Fig. 269. Pottery from Chamber-tomb I: 7.



Within the handle-zone is a crowded composition of four triangles filled with scale-pattern and with a small spiral at the top, two solid swelling ornaments and some smaller ones. Two wavy lines from the handle enclose the area opposite the spout. Below, on the shoulder, is a band of zig-zags, with the triangles above and below filled by lines parallel to one of the zig-zag lines in alternate directions; then a band with simple scale-pattern. On the body are three narrow bands. A loop connects the bases of the false neck and spout. On the conical top of the false neck is a spiral. On each handle are two broad, intersecting lines — such as are usual in the Geometric style.

18. Stirrup-vase (fig. 269: 8). H. 0.12 m, d. 0.1 m. Rounded body with high neck and spout, high foot, and conical top to the false neck. Greyish clay; black varnish, partly worn off. Within the handle zone are five groups of concentric semicircles. The body is encircled by narrow bands. A loop connects the bases of the false neck and spout. On top of the false neck is a spiral with a solid centre. The lip and handles are edged with paint.

19. Stirrup-vase (fig. 269: 9). H. 0.13 m, d. 0.13 m. Squat shape with spreading foot. Smooth, reddish-yellow clay; red varnish. Within the handle-zone are five simplified, conventional flowers, composed of increasing arcs. The body is encircled by broad and narrow lines. The bases of the false neck and spout are connected by a loop. On top of the false neck is a spiral with a solid centre. The handles and foot are painted. Good fabric.

20. Stirrup-vase (spout missing; fig. 270: 1). H. 0.097 m, d. 0.85 m. Globular shape. Reddish clay with yellow, polished surface; brilliant red varnish. Within the handle-zone opposite the spout, three crowded groups of parallel arcs, with a similar group on each side of the spout. The body is encircled by broad and thin lines; the foot and handles are edged with paint. On the conical top of the false neck is a spiral. A loop connects the bases of the false neck and spout.

21. Amphoriskos (fig. 270: 3). H. 0.215 m, d. 0.185 m. Rounded body with ring foot, high neck, and out-turned rim; on the broadest part of the body are two small loop handles round in section, set horizontally but slanting upwards. Pale yellow clay; red and black varnish. The shoulder and body are encircled by three broad, plain bands. The neck is black inside and out; the foot is unpainted.

22. Squat bowl (fig. 270: 5). H. 0.13 m, d. 0.325 m. Flat globular shape with rounded shoulder; very low mouth with flat, projecting rim; three small loop handles. Pale yellow slip; reddish-brown varnish. On the lower part of the shoulder is a broad, plain band, the upper edge of which is painted in deep waves, representing the bed of the sea. In each space between the handles is a pear-shaped drop of paint tapering downwards and connected by a thin line with the wavy band. Two plain bands below the design. The mouth and handles are painted. On the base are two concentric circles and six groups of each two wavy lines radiating outwards.

23. Squat bowl (fig. 270: 2). H. 0.115 m, d. 0.26 m. Shape like last, but body more

flattened; higher mouth. Smooth, yellow slip; black varnish; very fine fabric. Between the handles the bottom of the sea represented by rock-pattern, drawn as a solid wave enclosing a space filled with parallel loops, one plain, the other composed of dots; the upper edge of the rock has a dotted outline. The field around each handle is decorated with coralline forms, sometimes with dotted outlines, and with seaweed and star-fish as filling. There are two plain bands below the design. The mouth and handles are black. On the base is a central circle with a cross of wavy lines and ten wavy lines radiating outwards.

24. Squat bowl (fig. 270: 4). H. 0.012 m, d. 0.205 m. Shape as last but higher and more curved shoulder. Yellow slip; black varnish, partly worn off. Marine design like No. 22, but along the waves there is a dotted line, below the handles dotted circles, between the handles two parallel lines of dots, at the transition to the base three plain bands. The mouth and handles are black. On the base are two concentric central circles and five groups, each one composed of two wavy lines radiating outwards.

25. Squat bowl (270: 6). H. 0.095 m, d. 0.22 m. Shape as No. 22. Light-yellow surface; black varnish. Marine design like No. 22 but all the lines outlined with dots. The ordinary drop-shaped pendant is here more like a disc, rising from a wave depressed in the middle on the upper side. The mouth and handle are black. On the base, near the edge, are two concentric circles, inside in the centre two concentric circles and four groups of radiating, double wavy lines.

26. Squat bowl (fig. 270: 9). H. 0.085 m, d. 0.17 m. Shape as last but more flattened. Yellow surface; brownish-black varnish. Marine design like No. 22, but everywhere dotted outlines, also below the neck. The mouth, handles, and base like the last, but five pairs of radiating, wavy lines.

27 a. Squat bowl (fig. 270: 7). H. 0.085 m, d. 0.19 m. Flat shape with neck. Pale yellow surface; brownish-black varnish. The usual border of solid waves on the lower edge of the body, and sprouting from hollows between the waves three curved tongues of seaweed or other plants. The mouth is encircled near the shoulder; the handles are black. The centre of the base is ringed with three groups of concentric circles.

27 b. Squat bowl (fig. 270: 8). H. 0.05 m, d. 0.15 m. Like the last, but lower.

28. Squat bowl. H. 0.06 m, d. 0.15 m. Shape like last but with a lower neck. Yellow surface; brownish-black varnish. Decoration like last.

29. Squat bowl (fig. 270: 10). H. 0.07 m, d. 0.15 m. Shape like last. Yellow surface; brown varnish. No waves on base line from which spring two stylised plants between each pair of handles. The leaves are heart-shaped, with long, spiked points, and grow on triple stalks.<sup>1</sup> The mouth and handles are painted; on the base, which is

<sup>1</sup> The leaf is of that kind which Evans, *Palace of Minos II*, p. 478 ff., mentions under the heading of 'sacral ivy'. Nevertheless, I am not convinced that all the types which occur there have the same origin. The type which occurs here seems to me rather to belong to the marine flora. Forsdyke's observation to the effect that the decoration of squat bowls 'always seems to have a marine subject', and his explanation that 'the double and triple stalks which are so common in plants of this type seem to represent the distortion of marine objects by the ripple of the water', seems to me quite correct. Cf. B. M. Catalogue I, 1, pp. 134 and 141.

surrounded by three plain bands, two circles at the centre and five groups of wavy lines, radiating outwards.

30. Squat bowl (fig. 270: 11). H. 0.04 m, d. 0.06 m. The shape is almost depressed spherical. Yellow surface; brilliant, reddish-brown varnish. The usual border of plain waves on the lower edge of the body; a band below the neck. The mouth and handles are black; the centre and edge of the base are ringed. The rim has a thin band.

31. Squat bowl (fig. 270: 13). H. 0.15 m, d. 0.235 m. The body is a low cylinder with flat base; flat, stiff shape with three handles. Pale yellow surface; reddish-black varnish, mostly worn off. On the shoulder are conventional lilies with volute-like petals, springing to the left, and some groups of wavy lines springing from the flowers. On the body, between two broad lines above and below, there is a band with an interrupted wavy line. The neck is encircled and the handles are black. The base is edged with paint but otherwise undecorated. The lip has three concentric circles on the inside.

32. Bell-shaped bowl (fig. 270: 12). H. 0.13 m, d. 0.225 m. Sides contracted in a double curve. Flat bottom which has warped in firing; projecting rim. Two horizontal loop handles. Yellow clay; undecorated.

33. Bell-shaped bowl. H. 0.115 m, d. 0.215 m. Shape like last. Reddish clay; undecorated.

34. Lid (fig. 270: 14). H. 0.07 m, d. 0.175 m. Cylindrical lid of a box similar to e. g. the Late Minoan III box from Palaikastro, B. M. Catalogue I, 1, Pl. IX, A 708. Reddish, yellow clay; red varnish. Undecorated inside. The sides are red. On top, the centre is a plain with two pairs of concentric circles, and two others at the border. In the middle is a small round hole, which probably had a loop for lifting.

35. Stemmed goblet (fig. 271: 1). H. 0.14 m, with handle 0.20 m, d. 0.17 m. Deep, tapering bowl with out-turned rim and two high, flat loop handles set on vertically; short stem with dome-shaped foot. Smooth, greyish clay with lustrous surface; no painted decoration.

36. Stemmed goblet (fig. 271: 2). H. 0.11 m, with handle 0.17 m, d. 0.135 m. Shape and clay as last but shallower and only one high vertical handle.

37. Stemmed goblet (fig. 271: 3). H. 0.11 m, with handle 0.165 m, d. 0.14 m. Shape and clay as last, but the handle set not vertically but slanting upwards.

38. Stemmed goblet (fig. 271: 4). H. 0.165 m, d. 0.165 m. Deep, tapering bowl with out-turned rim and two low, flat loop handles; high stem with disc-foot. Pale yellow clay; undecorated.

39. Stemmed goblet (fig. 271: 5). H. 0.155 m, d. 0.165 m. Shape and clay as last; undecorated.

40. Stemmed goblet (fig. 271: 6). H. 0.145 m, d. 0.150 m. Shape and clay as last; undecorated.

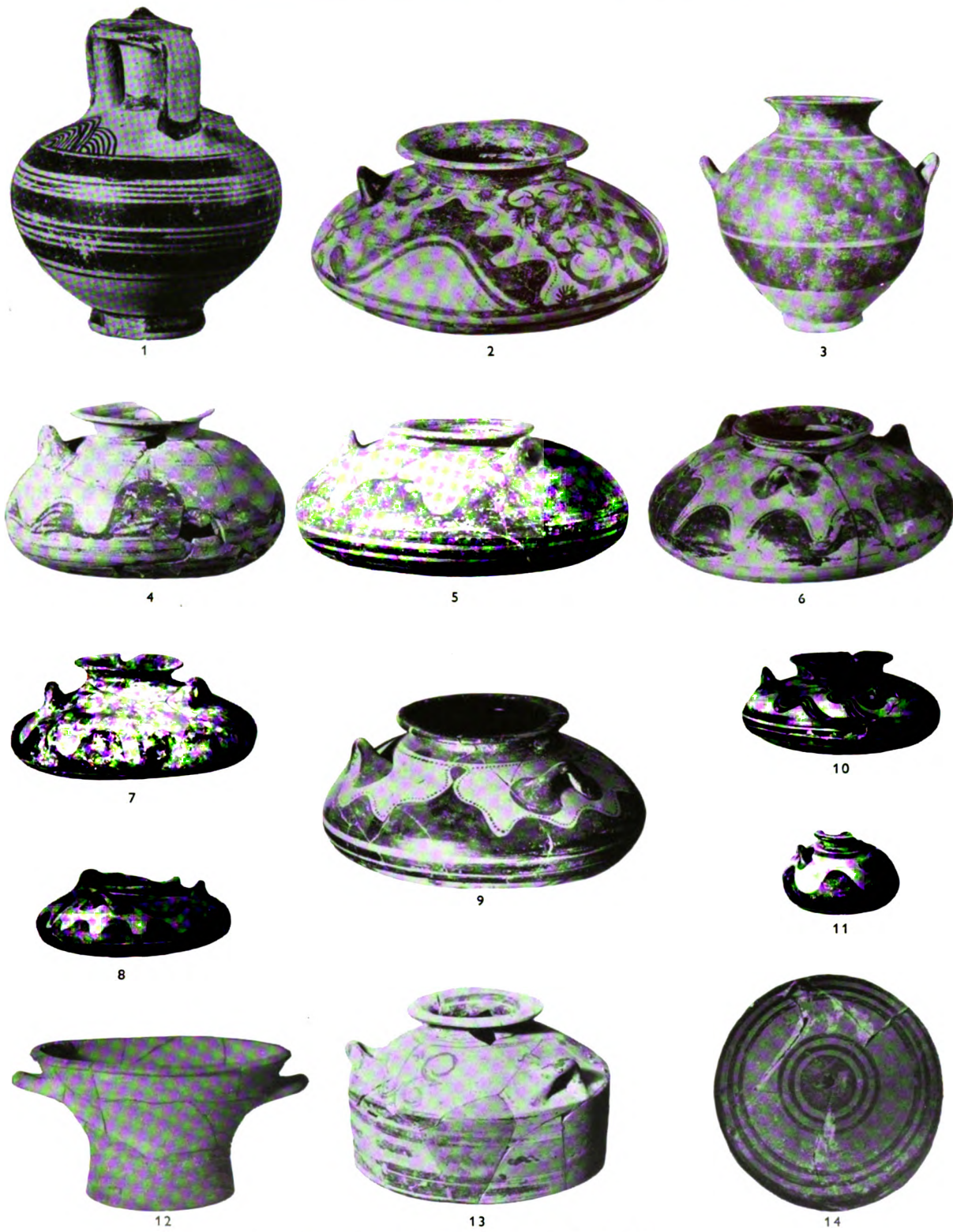


Fig. 270. Pottery from Chamber-tomb I: 7.



41. Stemmed goblet (fig. 271: 7). H. 0.145 m, d. 0.115 m. Bowl almost hemispherical in shape with one low, flat loop handle. Short stem with disc-foot. Coarse, yellow clay; undecorated.

42. Stemmed goblet (fig. 271: 8). H. 0.098 m, d. 0.12 m. Shallow bowl with tapering sides; one low, flat loop handle; short stem with disc-foot. Smooth, pale yellow clay with lustrous surface; undecorated.

43. Stemmed goblet. H. 0.085 m, d. 0.12 m. Shape as last but bowl more open. Very short stem. Pale yellow clay; undecorated.

44. Stemmed goblet (fig. 271: 10). H. 0.11 m, d. 0.13 m. Body shallower, with the sides sloping gently away from the stem, sharply from the lip, and meeting at an angle. Reddish-yellow clay; no decoration.

45. Stemmed goblet. H. 0.115 m, d. 0.115 m. Clay and shape as last, but shoulder-angle more pronounced.

46. Saucer (fig. 271: 9). H. 0.045 m, with handle 0.10 m, d. 0.145 m. Open, very shallow shape with high, flat loop handle slanting upwards; no spout; flat base pressed in. Greenish-yellow slip; brownish-black varnish. Between the black lip and a group of three, thin, plain lines round the middle of the sides, are groups of arcs and wavy lines. The handle is edged with paint and between the edges are chevrons. Round the base are two plain lines. The lip is edged with paint.

47. Saucer (fig. 271: 12). H. 0.033 m, with handle 0.065 m, d. 0.12 m. The shape is the same as in the last but with vertical ring handle set on the rim; raised foot. Reddish-yellow clay which has flaked off; brownish-black varnish. Round the body, near the base, is a band from which grow six four-leaved, marine plants. The handle, lip, and foot are painted.

48. Saucer (fig. 271: 11). H. 0.055 m, with handle 0.09 m, d. 0.16 m. Shape the same as last but deeper and with bridged spout on one side. Greenish-yellow surface; brilliant, brownish-black varnish. The body is decorated as in the preceding case. The handle, spout, and foot are edged with paint. There are bars on the rim.

49. Saucer (fig. 271: 14). H. 0.045 m, with handle 0.08 m, d. 0.19 m. Shape as last. Reddish-yellow clay which flakes off; red varnish. Round the body, near the base, is a line from which grow five heart-shaped leaves with protracted points on triple stalks, marine plants. The handle, rim, spout, and foot are painted.

50. Cup (fig. 271: 13). H. 0.055 m, d. 0.115 m. Shallow, hemispherical shape with flattened base. Red clay; undecorated.

51. Cup. H. 0.04 m, d. 0.10 m. Shallow, conical shape with flattened base. Red clay; undecorated.

52. Ladle (fig. 271: 14). H. 0.05 m, d. 0.12 m, l. of handle 0.10 m. Shallow bowl on low, raised base with a slight groove on one side and a slightly flattened handle on the opposite side, projecting from the rim and bent downwards, and with a large, vertical hole through the end for hanging up. Coarse, red clay; undecorated.

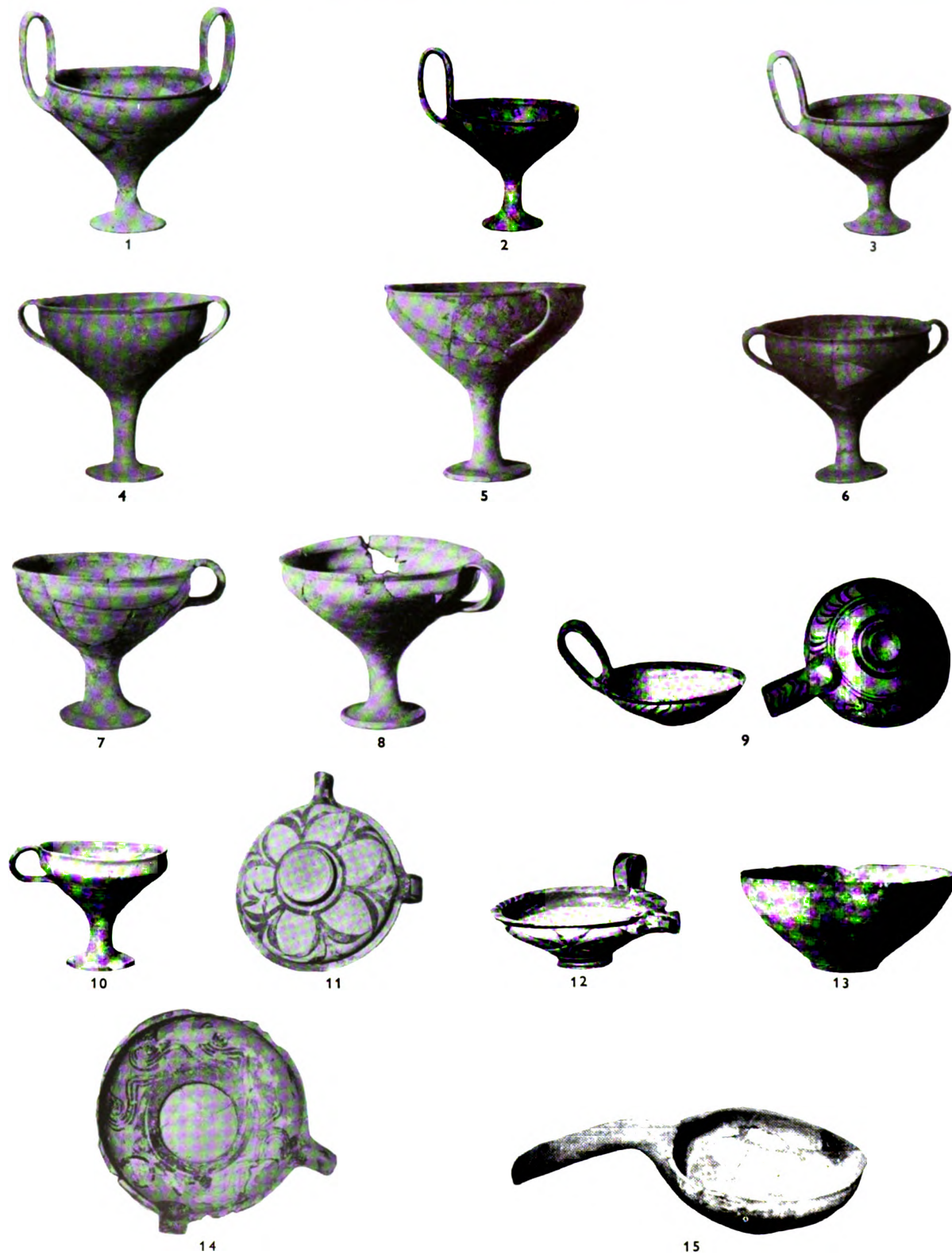


Fig. 271, Pottery from Chamber-tomb I: 7.





Fig. 272. Pottery from Chamber-tomb I: 7.

*From the dromos.*

53. Three-handled jar of Palace Style; neck and part of the shoulders restored (fig. 272). H. about 0.53 m, d. 0.44 m. Piriform, with almost straight sides and three horizontal loop handles. Light-brown clay with lustrous, yellow slip; brownish-black varnish. Decorations: From a knoll, rising out of the plain, lower part of the body, between each pair of handles grows a group of three palm-trees of Late Minoan I B type — cf. Evans, »Three Palms» Motive, in *The Palace of Minos II*, p. 493 ff. To the



Fig. 273. Pottery from Chamber-tomb I: 7.

left of each group the »Sacral Ivy» motive — cf. Evans, *ib.*, p. 478 ff. — likewise of Late Minoan I B type. As filling ornaments there are large rosettes with seven or ten petals, small circles with radiating dashes (like star-fish, here perhaps solar symbols), small, equal-armed crosses with dots in the angles, small, parallel, wavy lines with dots, and groups of three dots. The handles and foot are black. — The vase is almost identically with vase No. 15 from Tomb A at Kakovatos.<sup>1</sup>

54. Three-handled jar of Palace Style; lower part of the body partly restored (fig. 273). H. about 0.37 m, d. 0.30 m. — Shape, clay, and varnish as last. Instead of

<sup>1</sup> Cf. K. Müller, *Alt-Pylos*, in *Ath. Mitt.* XXXIV (1909), p. 312, Pl. XXI.



the palm-trees sprouting from one mound, here in each interval between the handles there is a larger one, below the handles a smaller one, sprouting from the black baseline. In this way from every point of view the three-palm motive is presented with a large tree in the centre and two smaller ones at the sides. Instead of the tendrils with heart-shaped leaves on the previous vase, the leaves here occur one at a time or single, with four of them placed in pairs. The leaves have same outlines as those found on the Kakovatos vase No. 8 from Tomb A<sup>1</sup> and also on Cretan pottery during Late Minoan I.<sup>2</sup> From the neck smaller, more simply drawn palms sprout downwards. Some small, equal-armed crosses placed in pairs on each wave must be considered as filling ornaments exactly the same as those found on vase No. 15 from Tomb A at Kakovatos, and on a fragment from Mycenae, now in the British Museum, cf. B. M. Catalogue I, 1, p. 133, A. 770, 1, about which Forsdyke says that »this curious motive was certainly used to represent the ground, perhaps with growing plants, in designs of the 'landscape' class». Cf. vase No. 12 from Tomb A at Kakovatos, Ath. Mitt. XXXIV (1909) Pl. XX, and possibly Pl. XXIV, 7. The neck, handles, and foot are black; the lip is barred.

#### *Miscellaneous finds*

##### **Gold.**

Only two small pieces of shapeless gold leaf.

##### **Ivory and Bone.**

1. Five ivory rosettes, d. 0.028—0.015 m. Fragments of two more.
2. Two fragments of two ivory combs with simple linear ornament applied horizontally near the base of the teeth. Preserved length resp. 0.03, 0.045 m, h. resp. 0.03, 0.022 m.
3. Four bone pins, more or less fragmentary.
4. One piece of boar's tusk with holes for fastening at the edges, d. 0.061 m, br. 0.016 m.

##### **Glass-paste.**

Eighty-two round or elongated beads of glass-paste, d. 0.015—0.005 m.

##### **Stone.**

1. Three round amethyst beads, d. 0.008—0.005 m.
2. Thirty-eight steatite buttons of different shapes: 15 of type A, 7 of type B, and 16 of type C (cf. Tomb I: 1). H. 0.015—0.009 m, d. 0.023—0.014 m.

##### **Bronze.**

1. Fragment of a mirror with a hole for the fastening of the handle. Preserved height 0.12 m, br. 0.08 m.
2. Fragment of bronze ring.

<sup>1</sup> Cf. K. Müller, *ib.*, Pl. XVIII.

<sup>2</sup> Cf. e. g. B. M. Catalogue I, 1, p. 109, fig. 138, A. 682, 2.

3. Fragments of two bronze nails and heads of three others.
4. Shapeless piece of bronze.

**Lead.**

A large quantity of lead in the shape of thick and thin wire.<sup>1</sup>

Furthermore, large quantities of clay packing No. 55 have been found, but only in the squares B 1—C 1, B 2—C 2, B 3, C 3 (a very few remains come from A 2 and B 4). The packing is of very finely levigated clay and has been pressed so hard against the boards at right angles to them as to leave distinct traces of the unevenness and fibres of the wood visible (cf. above).

The last three burials can here be distinguished, thanks to the accumulation of the burial vessels: the vases 15, 16, 20 belong to one, Nos. 12, 17, 19 to another, and Nos. 6, 7, 18, to the left of the door, probably to the very last. But no properly preserved skeletons were found close to these groups of vases.

**CHAMBER-TOMB II: 1.**

*Pottery*

1. Jug (fig. 274: 1). H. 0.19 m, d. 0.165 m. Almost spherical body with flattened



Fig. 274. Pottery from Chamber-tomb II: 1.

base and cylindrical neck with round loop handle from lip to base of shoulder. Reddish clay; yellow surface; undecorated.

2. Jug (fig. 274: 2). H. 0.12 m, d. 0.105 m. Shape as last but with flat handle rising vertically from the shoulder. Pale yellow clay; black varnish. The exterior is altogether covered with paint, partly worn off.

<sup>1</sup> Cf. Chamber-tomb No. III at Dendra, Persson, *The Royal Tombs at Dendra*, p. 89, fig. 62, and p. 90. As regards the use of this lead wire, it is beyond doubt, thanks to close observations made in an as yet unpublished chamber-tomb at Berbati-Prosymna, that it was used for dress-weights to improve the hang of the material and the artistic pleats. The idea which Zehetmeier, *Leichenverbrennung und Leichenbestattung*, p. 22, has advanced, that these strips of lead had served for binding the dead, must therefore be abandoned, even if a similar custom does exist in Greece in our time — cf. Keramopoulos, *Ἡ Ἀποστομπατισμὸς*, p. 52, foot-note 2.

## PROTO-GEOMETRIC TOMBS

In the layers between L. H. III and Geometric a comparatively large number of tombs have been found in the Lower City, showing a rather homogeneous type, long cists with the corpses buried in out-stretched, dorsal position. The finds in some of these tombs date them fairly well. Apart from them are also some earth-cut graves, undoubtedly of the same period.

During the Proto-Geometric period we have the following types:

- I. Shaft, cut in the earth, »earth-cut«, and
- II. Cist a) of large ashlar blocks placed on edge,  
b) of smaller stones or rubble.

Orient- ation	Earth-cut		Cist		Total
	Child	Adult	Child	Adult	
	2	3	27	11	
E.		1	4	3	8
S.E.		1	1	1	3
S.		1	2	3	6
S.W.				1	1
W.					—
N.W.			2	1	3
N.			1		1
N.E.			5		5
Uncert.	2		12	2	16

All the tombs are single tombs situated among dwellings, though it cannot be said with any certainty that they are intra-mural burials. Similar observations made on the Middle Helladic tombs, that approximately 72 % of them are childrens' tombs, can also be made about this material, and the cause is probably the same, that adults, as a rule, were buried elsewhere.

The corpse was usually buried stretched out on the back, but there are some examples where the skeleton was found in a contracted position. In one of these cases the cist obviously was found to be too short, and the corpse was buried with the feet pushed against the ashlar block at the bottom, with the knees drawn up to the chin (No. 28). It seems probable that it was in both cases (Nos. 12, 31) the same, since the bodies are laid out on their backs and in one case the head is lying in an opposite direction

to the legs. Besides, it can be observed in two cases that the heads had been lying on a kind of pillow (Nos. 34 and 38) of some perishable material from which they had slipped down. The crooked position of the head in two other cases (Nos. 17 and 31) may probably be explained in the same way.

During the Middle Helladic period no definite orientation of the corpse could be determined, and the scanty material from the Mycenaean period does not give any definite evidence on this point. In the Proto-Geometric tombs, on the other hand, there is a noticeable tendency to bury the dead with the head towards the east: in 20 out of 27 cases that can be proved, the head lies in the east, south-east or north-east, while in the remaining cases it lies otherwise. This arrangement with the head in the east during the Proto-Geometric period, seems just as firmly established as the Christian custom of burial with the head in the west, facing the rising sun as an expression of the idea of resurrection. The question now is whether there is any justification for, or possibility of attributing any significance to this.

Amongst many races the Kingdom of Death, or the entrance thither, is located in the west. The Egyptians located it there, and from the exhaustive descriptions that exist we learn why: the sun sets there: »dieser Vorgang erinnerte an den Tod, dessen Reich man daher ebendort suchte. Zugleich meinte man wohl, die Sonne müsse doch auch nach ihrem Untergange irgend jemand leuchten; so liess man sie bei Nacht in der Unterwelt scheinen, dachte aber deren Eingang als im Westen liegend.«<sup>1</sup> That the west for the Greeks, just as for the Indians, was »die Himmelsgegend der Toten«, is clear from various rituals.<sup>2</sup> For my own part I am inclined to see more than a mere chance in the fact, which, as far as I am aware, has never before been pointed out, that so many of the earlier burial places in the neighbourhood of Greek towns, where the conditions of the ground permitted, are situated in the west or north-west. This holds good for the Dipylon cemetery, in Athens; for the cemeteries at Eleusis, at Corinth, and, to a certain extent, for Sparta; it also holds good for the Geometric Necropolis at Asine; it holds good for Thera (the Necropolis in the west and north-west), and for Vrouliá in Rhodos (in the north-west). I am very much inclined to see in this an inheritance from the older Geometric period; the practice of cremation then brought confusion, and for the Classical period it is impossible to determine either any one definite orientation of the dead, or any orientation of the cemetery in relation to the town or city.

The preceding remarks will have to suffice as explanation for the conception at which I have arrived, that the position of the corpse with the head towards the east is partly due to the ancient idea or belief common to Greeks and Indians, that the Kingdom of the Dead lies in the west. The dead is laid out in a position to start his last, long voyage to the shadow-world, he has his glance directed to the setting sun,

<sup>1</sup> Cf. Clemen, *Das Leben nach dem Tode*, p. 44.

<sup>2</sup> Cf. Eitrem, *Opferritus und Voropfer der Griechen und Römer*, p. 119 f.



not towards its rising or its midday zenith, and the burial place is to the west of the town so that the spirit of the dead on its wanderings thither, and in the event of its possible return, is not troubling the living.

As to the position of the arms, a change seems also to have been made from the pudica-position most common during Middle Helladic times to the natural position, with the arms down the sides. The cases where the position of the arms could be determined, are summarized in the ensuing synopsis:

Positions of arms	Earth-cut	Cist	Uncertain	Total
L. hand before pudendum .....	—	2	—	2
R. arm on breast .....				
R. hand before pudendum .....	—	2	—	2
L. arm on breast .....				
Both hands before pudendum .....		3	1	4
Both hands on the breast .....	1	1	—	2
Both arms along sides .....	1	14	—	15

It is obvious that the position of the arms by the sides became the natural one when the corpse was laid out in the extended position. But it is also possible to demonstrate other positions also found in Middle Helladic burials most commonly the pudica-position in its three variations.

In two tombs a lower layer of pebbles or coarse gravel was found like that in some Middle Helladic tombs. In other places, too, the same thing has been found.<sup>1</sup> The phenomenon, however, is much rarer in this than in the Middle Helladic period, when one-fifth of all tombs had such a layer. On the other hand, the number of tombs containing burial gifts has proportionately increased very much. Still it should be emphasized that by no means all tombs contain offerings, and even many of the best-constructed cist-tombs are without this hint of the survivors' sorrow over the dead. On the other hand, it is only in cist-tombs that finds have been made.

The summary on p. 425 will give an idea of the distribution and nature of the burial offerings.

From this account it may thus be seen that burial gifts have been found in 18 of the 46 tombs, or in 39 % — as against 16 % of the Middle Helladic tombs. The kind of offerings is the same, mostly pottery, but there is one important exception, namely the dress-pins found in five of the tombs. These bear witness to a change in dress, and not a single specimen has been found in the Middle Helladic tombs. It is also worth while to point out in this connection that not a single fibula has been

<sup>1</sup> Cf. Mylonas' statement, with a certain hesitation, of such a tomb at Eleusis, *Ἐλευσινιακά*, p. 42.

Tomb No.	Type	Sex	Burial gifts						
			Pottery	Spindle-whorl	Knife	Pin	Ring	Astragale	Varia
1	Cist (?)	?				Bronze R.			
3	Cist	Woman					Bronze		
9	Cist	Child	Cup, two jugs						
10	Cist	?		Carinated		Iron R., Bronze fragm.			
12	Cist	?				2 Bronze R. L.	Bronze		
17	Cist	Man				Iron L.			
18	Cist	?	Cup, two jugs						
24	Cist	Half-grown						R.	
25	Cist	?	3 L. H. III vases						
26	Cist	Child	2 L. H. III vases						
27	Cist	Child	4 L. H. III vases	Steatite					
35	Cist	Child	Ladle, jug						
36	Cist	Child	Cup						
37	Cist	Child	Cup						Animal bone, thick fragm.
39	Cist	Half-grown							Turtle shell
40	Cist	?			Iron	Iron R.			
43	Cist	Adult				Bronze R. 2 Iron L.			
44	Earth cut	Adult				Iron L.	Bone		

R.=right shoulder; L.=left shoulder.

found in these tombs — but the occurrence of the fibulae in tombs is very erratic.<sup>1</sup> However, both the fibula and the dress-pin are clearly very closely connected with the Doric woollen peplos; neither of them played any part on Ionian soil, and towards the end of the 5th century they also disappear in Greece proper. It should also be remembered in this connection that the Mycenaean steatite button also disappears

<sup>1</sup> Cf. Blinkenberg, *Fibules grecques et orientales*, p. 19.

when the dress-pin and the fibula become common; it is clear that a thorough change in dress occurred. It must have been at this period that the dress which we know so well from the Mycenaean representation was succeeded by the one we find on the oldest Greek monuments from the Greek mainland.

As to the position of the dress-pins in the tombs, they have been found either on both shoulders or on one only, in that case usually on the right one. For further discussion, cf. Thierschs dissertation, *Wie die Nadeln gebraucht wurden*.<sup>1</sup>

In the course of the excavations in the Proto-Geometric stratum, in several places on the same level as the tombs, cists were found, which were entered in the journals as tombs when they were first discovered but which on closer investigation were found not to contain any traces of corpses. I shall give a list of them here:

1. Immediately east of Tomb P. G. 23 and approximately on the same level was found a small, almost round, cist-tomb 0.80 m  $\times$  0.70 m in cross-section. This was assumed to be a tomb. When it was later investigated, it was found to consist in the centre of double courses of rubble masonry. Inside were found two grindstones. The outer stones were flat and placed on edge, sloping slightly outwards. Close by, charcoal and ashes were found (fig. 118 B).

2. Beside Tomb P. G. 23 immediately south-west of the latter was a small, round ring of stones which was suspected of being a tomb. It measured 0.55 m  $\times$  0.45 m in cross-section. On the ashlar blocks placed on edge, lay a large, round stone on a level with the covering blocks of the tomb. Here charcoal and ashes were found (fig. 118 A).

3. Close to Tomb P. G. 21, a low heap of stones was found, described as a small, uncovered cist. On excavation it was found to contain a thick layer of ashes with a few pieces of bone (as far as could be ascertained not human) and some sherds. Outside the cist, too, lay a heap of ashes.

4. In connection with the tomb described in the synopsis above under Tomb P. G. 18, there was mentioned a large, round stone, d. 0.50 m, situated at the northern long-side of the cist. In the neighbourhood traces of charcoal and ashes.

5. In association with the tomb described in the synopsis under P. G. 29 mention was made of a large, flat stone, 0.30 m d., situated at the southern end of the cist in connection with a 0.20 m to 0.30 m thick layer of ashes.

In all these cases we have to do with tomb-altars of the same type as those already described when dealing with the Middle Helladic tombs. These Proto-Geometric tomb-altars should undoubtedly be interpreted as the predecessors of the places for cremation found in the Geometric period within the necropoles themselves: here the corpse has still been buried uncremated, but some votive or sacrificial gifts have been burnt, a custom already prevalent during the Mycenaean period.<sup>2</sup> The tomb-

<sup>1</sup> Aegina, p. 404.

<sup>2</sup> Cf. e. g. Persson, *The Royal Tombs at Dendra*, p. 70.

altar can therefore be followed from the M. H. period (Asine), through Late Helladic (e. g. Mycenae) down to Proto-Geometric times (Asine), and is a proof of the uniformity of the religious ideas, and thus quite certainly also of the ethnical homogeneity of those who erected them.

The closed pottery finds made in the Proto-Geometric tombs are of the utmost interest because they supply us with a striking synchronism of some pottery types. The vessels here concerned are all of a simple kind and, consequently, there is no need for that minute exactitude as to their chronological interrelations, which is right and proper when it concerns finds in chamber-tombs, and, even more so, in tholos-tombs.

*Tomb P. G. 9 (fig. 275).*

1. Cup. H. 0.055 m, d. 0.125 m. Hemispherical body without base. About 1 cm



Fig. 275. Pottery from Tomb P. G. 9.

below the rim the wall is pierced, probably to make a string-hole. Brownish-yellow clay; leathery lustre; made without the help of a potter's wheel. Undecorated.

2. Jug. H. 0.15 m, d. 0.10 m. Globular body with high ring foot, short, cylindrical neck with trefoil lip and flat handle. Pale yellow clay; black varnish, partly flaked off. Entirely covered with varnish, except for a band round the middle of the body with a group of four thin lines, and a zig-zag line between the two middle ones. On handle, bars. Lip edged with paint.

3. Open bowl. H. 0.085 m, d. 0.085 m. Bell-shaped body with rim splayed slightly outwards, two slanting loop handles (one is missing) set horizontally on middle of side, and high, hollow, conical foot. Greyish-green clay; dull-black varnish, mostly flaked off. The whole body, inside and out, is painted, except the lowest part and the foot.

*Tomb P. G. 18 (fig. 276).*

1. Cup. H. 0.07 m, d. 0.75 m. Shape as last but only one flat loop handle springing from below the lip to the middle of the body. Pale yellow clay; black varnish. Entirely covered, inside and out, except some thin lines accidentally left on lower edge of



foot, on the inside of the rim, and a fairly broad band surrounding the rim and upper edge of the body, decorated with a zig-zag line between thin enclosing lines. On handle, bars.

2. Jug. H. 0.12 m, d. 0.08 m. Globular body with high, spreading ring foot, short, cylindrical neck flaring out in trumpet-shape, and a solid, flattened loop handle from lip to shoulder. Pale yellow clay; dull, brownish-red varnish. In the shoulder-band six triangles filled in with paint between three parallel lines below and on the neck. The handle is barred, the mouth is edged with paint, the lower part of the body and foot are painted.

3. Jug. H. 0.08 m, d. 0.065 m. Oval body with flattened base and wide mouth



Fig. 276. Pottery from Tomb P. G. 18.

with roughly formed trefoil lip, and a small, flat loop handle from lip to shoulder. Brownish-yellow clay; leathery lustre; made without potter's wheel. Undecorated.

*Tomb P. G. 25 (fig. 277).*

1. Jug. H. 0.205 m, d. 0.135 m. Oval body with ring foot, cylindrical neck flaring out into trumpet-shape, raised ring at base of neck, and small, twisted loop handle from the middle of the neck to the upper part of the shoulder. Pale yellow clay; black varnish. In the shoulder-band five lattice-filled triangles, the sides with triple outlines, and two solid opposing triangles placed vertically; in the lower field are two similar triangles arranged horizontally, the former pattern being repeated four times, the latter three times. Otherwise the whole vase is black on the outside, with the exception of a couple of thin lines in the original colour of the clay running round the body of the vase.

2. Jug. H. 0.20 m, d. 0.12 m. Oval body with spreading ring foot, and gentle transition to an upwardly tapering neck, with moulding at the base, and a high, bold trefoil lip; a ribbed loop handle from lip to shoulder. Pale yellow clay; blackish-red varnish. In the shoulder-band three lattice-filled triangles with double outlines. The whole vase is black, with the exception of a broad line in the natural colour of the clay around the middle of the body of the vase round the foot.

3. Open bowl. H. 0.127 m, d. 0.13 m, d. of foot 0.02 m. Bell-shape with rim splaying outwards, two slanting loop handles set horizontally on the upper part of the sides,



Fig. 277. Pottery from Tomb P. G. 25.

and high, hollow, conical foot. Pale, reddish-yellow clay; black-red varnish. Entirely covered with paint, inside and out, except for a thin line on the inside near the rim, the shoulder-band decorated with a zig-zag line between the bordering lines and a thin line round the lower part of the body.

*Tomb P. G. 26 (fig. 278).*

1. Jug. H. 0.155 m, with handle 0.195 m, d. 0.10 m. Oval body with spreading ring foot, cylindrical neck widening upwards, and a high loop handle with bar across the middle, set horizontally on the rim. Yellow clay; metallic black varnish. The whole jug is covered with black, except for a band round the middle of the body in the natural colour of the clay, with two thin lines above and two below, and between them a row of closely set, plain triangles; the foot has a band; the handle is barred.

2. Cup. H. 0.082 m, d. 0.085 m. Bell-shaped body with rim splaying slightly outwards, one flat vertical loop handle from the rim to the broadest part of the body, and high, hollow conical foot. Pale yellow clay; black varnish. Entirely covered with black, inside and out, except for one thin line in the colour of the clay on the inside of the rim, two similar ones on the outside. On handle, bars.



Fig. 278. Pottery from Tomb P. G. 26.

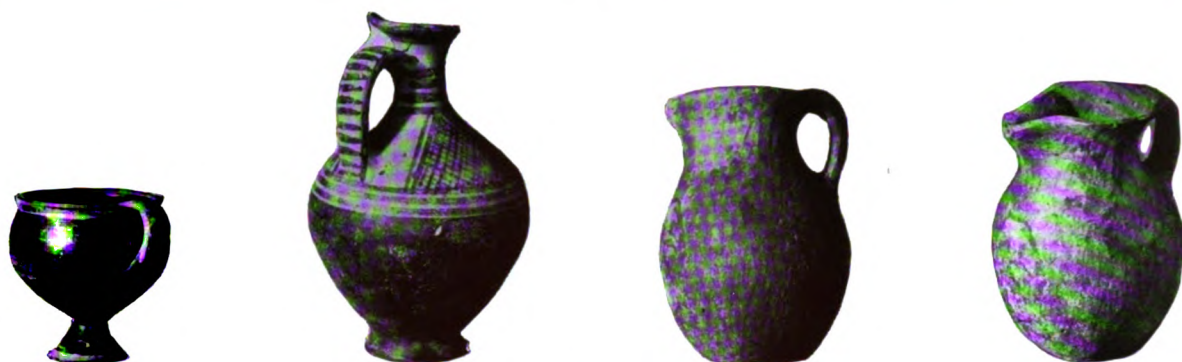


Fig. 279. Pottery from Tomb P. G. 27.



Fig. 280. Pottery from Tomb P. G. 35.

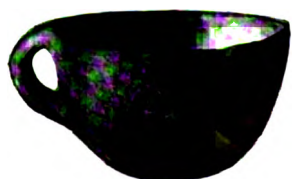


Fig. 281. Pottery from  
Tomb P. G. 36.

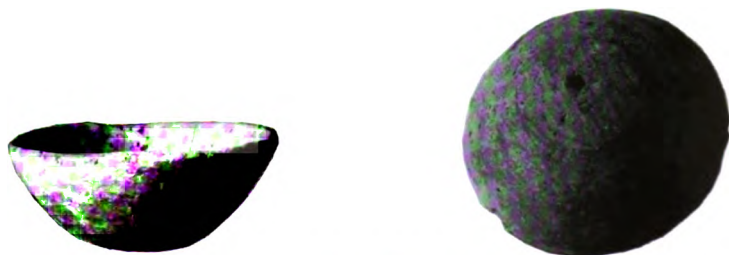


Fig. 282. Pottery from Tomb P. G. 37.

*Tomb P. G. 27 (fig. 279).*

1. Cup. H. 0.069 m, d. 0.065 m. Shape, clay, and varnish as last but the centre of the inside and the edge of the foot have been left in the natural colour of the clay. On the rim, on the outside, two bands, on the inside one. Handle barred.

2. Jug. H. 0.16 m, d. 0.10 m. Oval body with ring foot, narrow, cylindrical neck flaring out in trumpet-shape, and a flat loop handle from the neck below the mouth to the shoulder. Pale yellow clay; dull, brownish-black varnish. In the shoulder-band three latticed triangles with double outlines, round the neck four plain lines, at the base of the shoulder three. Body and foot entirely painted, the mouth edged with black, and the handle barred.

3. Jug. H. 0.12 m, d. 0.08 m. Oval body with flattened base and wide mouth with roughly shaped trefoil lip, and a round loop handle from lip to shoulder. Brownish-yellow clay; leathery lustre; made without potter's wheel. Undecorated.

4. Jug. H. 0.075 m, d. 0.05 m. Oval body with flattened base and wide, round mouth, and a small, round loop handle from rim to shoulder. Brownish-yellow clay; leathery lustre; made without potter's wheel. Undecorated.

*Tomb P. G. 35 (fig. 280).*

1. Jug. H. 0.11 m, d. 0.08 m. Oval body with flattened base and wide mouth with roughly formed trefoil lip, and a ribbed loop handle from lip to shoulder. Brownish-yellow clay; leathery lustre; made without potter's wheel. Undecorated.

2. Ladle. H. 0.055 m, with handle 0.122 m, d. 0.082 m. — Hemispherical body, somewhat flattened at base, with a high loop handle springing from the rim. Brownish-yellow clay; leathery lustre; made without potter's wheel. Undecorated.

*Tomb P. G. 36 (fig. 281).*

Cup. H. 0.065 m, d. 0.11 m. Shallow, globular shape with roughly flattened base. In the centre of the base a comparatively large hole, clearly made before firing. Brownish-yellow clay; leathery lustre; made without potter's wheel. Undecorated. Wood-imitating shape.

*Tomb P. G. 37 (fig. 282).*

Bowl. H. 0.045 m, d. 0.11 m. Shallow shape; roughly flattened base, in the centre of which is a comparatively large hole, made before the firing. Brownish-yellow clay; made without potter's wheel. Undecorated.

This is probably not a lid but a bowl that must probably be considered as an improved development of the cup No. 1 from Tomb No. 9, which had a string-hole about 1 cm below the rim. Experience must soon have shown that such a portion was not suitable, because the brittle and weak character of the clay would not have stood such a strain, and the piece would have broken off. The string-hole was therefore moved to the centre of the vessel, where at any rate it was strongest. The position of the hole in the centre of the bottom would not have caused any difficulty if a finger had been placed over the opening when the vessel was being used.



## Conclusions.

In the preceding pages, the main weight has been laid upon those finds which belong to pre-Mycenaean times. An exhaustive treatment of the finds belonging to the L.H. III and later periods has seemed less necessary in view of the great publications which of late years have seen the light of day, viz. Wace, *Chamber Tombs at Mycenae*, and quite recently, Blegen, *Prosymna*. I consider myself all the more entitled to leave out of account a detailed treatment of the L.H. III material, which one of my disciples, Arne Furumark, M.A., at my instigation has subjected the Mycenaean pottery to a thorough investigation, and I beg to refer the reader to his paper, «The Mycenaean Pottery», which will very likely be available in print simultaneously with this work, and which at the same time takes into account the Asine material. The sub-Mycenaean and Proto-Geometrical material has, on the other hand, in view of the uncommonly rich finds at Asine, been more exhaustively dealt with. The Geometrical, which certainly represents splendid finds, has been dealt with more summarily, due to the investigation at Asine not yet having been extended over a sufficiently large number of tombs which might supply the necessary synchronisms for establishing an even approximately safe dating. The Hellenistic and Roman material derived from relatively sparse settlements has likewise been summarily dealt with, but some groups of finds will be further dealt with in another connection.

Neolithic culture at Asine is not represented by cultural strata, but the locality had obviously been taken possession of immediately after the beginning of the Bronze Age by Anatolian tribes immigrating from the East. The oldest forms of vases (fig. 154: 2, 3), which have their counterparts in the older strata of Alishar-Hüyük and Troy, point to a connection with Asia Minor. These immigrants overran the islands in the Aegean Sea, Crete and the Greek mainland, where the bearers of the neolithic culture, to judge from the pottery, were large displaced and driven away from their old settlements towards the north, where this culture survived by way of example in Thessaly right down to the 2nd millenium.

During the E.H. period, the relations between the three cultural worlds, which gradually developed in Crete, the Cyclades and on the Greek mainland, were constantly maintained. Evidence of this we have already in the occurrence of the obsidian coming from Melos, which we encounter throughout the Aegean area, and still further the occurrence of glaze paint. Glaze paint cannot be demonstrated at Asine until E.H. II (cf. p. 206), in Crete already during E.M. I, and it seems probable that the use of this

means of decoration as a substitute for the previously used slip, which is characteristic likewise of Anatolia, was taken over by the mainland from Crete. This assumption gains in force by the discovery of Cretan impressions of seals at Asine, which indubitably prove relations between the mainland and Crete during E.H. III. These impressions of seals are of extreme value, because they permitted for the first a definite dating to the E.H. III period.<sup>1</sup> Also fragments of small Cretan stone vessels and the occurrence of steatite for example in the pendant evidence of these relations. Under such circumstances it seems natural that also a certain amount of influence on the forms of pottery can be proved (fig. 167: 1). Of importance for the chronology in the Cyclades are finds of some typical E.C. sherds in pure E.H. III strata (fig. 171), and some common forms of vases<sup>2</sup>. In favour of contact with Anatolia speaks the occurrence of a false potter's wheel (fig. 168), a seal (fig. 172: 4), stone axes (fig. 175: 6), forms of vases, etc.

As to the types of houses, we may state that safe foundation walls only occur from E.H. III, and then are both rectangularly and absidally represented. Of special interest is House R on Terrace III with its three rooms.

The children's tombs on the pre-Mycenaean terrace represent a type not previously demonstrated safely for E.H., rock-cut, single tombs.

At the beginning of the M. H. period, which in round figures might be put down at 2 000 B. C., there occurs a break in the development which can only be explained by assuming a fresh element of people on the Greek mainland. At Asine, the same as elsewhere, wherever M. H. culture strata are superimposed on E. H. strata, is found a more or less thick fire stratum. One may be justified in assuming in the immigrants to see the first Indo-Europeans, the Ionians, if we follow the ancient term used for the Greek tribes and adhere to the tradition about their immigration. These Indo-Europeans came very like from the Upper Balkans, and some of them seem to have separated already to the north of the Bosphorus and penetrated into Thrace and Macedonia. Those who crossed the Bosphorus, again divided into two currents, one of which went east, forming the Indo-European super stratum in the subsequent Hittite kingdom, the other followed the coast of Asia Minor southward and thence overran the islands in the Aegean Sea and reached the Greek mainland, while Crete remained untouched. Quite a new culture arose on the mainland and the old relations with Crete were broken off, not to be renewed until about 1 700 B. C.

In favour of the connection between the M. H. culture and the culture in the northern Balkans speak the similarities in the funeral habits, viz. contracted position, pottery, axes perforated for a haft (fig. 175: 6), the use of stag-horn for hafts for minor stone axes, and as picks (fig. 178: 1), further clay seals (fig. 172: 9). To judge from the Asine material it is impossible to combine anything but the pre-stages of Minyan

<sup>1</sup> Cf. Persson, *Quelques sceaux et empreintes de sceaux d'Asiné*, p. 171 f.; Blegen, *Zygouries*, p. 218 f.

<sup>2</sup> For the relations between the Greek mainland and the Cyclades, cf. Blegen, *Zygouries*, p. 210 ff.

pottery, our M. H. I pottery (p. 259) with this immigration. After a brief period, possibly not even a century, there came a culture wave from Anatolia which brought in its train fresh particular features in M. H. culture, and in my opinion marks the beginning of M. H. II. I refer the pithos burial to these characteristics (p. 349) and the Matt-painting (p. 271). To this might be added dress pins with stone heads and bronze pins of the same kind as those met with at Alishar-Hüyük (fig. 182: 1). The direct connection with Anatolia is apparent likewise from the adoption of other types of pottery. It is quite natural that here the Cyclades served as an intermediary link, and first and foremost the close affinity of the M. H. II culture to the M. C. culture is palpable, not merely in the shapes of vases but also in respect of decoration on the Matt-painted vessels. Further evidence of this connection is to be found on the potter's marks on some bottoms of vases from Asine. On the other hand there are lacking at Asine evidences of direct contact with Crete during M. H. II. It was not until the beginning of M. H. III that the relations were resumed, and the discovery of the potter's wheel at Asine should, in my opinion, be brought into contact with this; in Crete it had already come into use during a couple of centuries before the beginning of the M. H. III period. Further evidence of these re-opened relations are to be seen in the forms of vases and decorative patterns taken over and adopted from Crete. A few sherds of Kamares vases have been found at Asine, and one group of vases, Glaze Painted, light on dark, displays particularly clearly the influence of Crete.

Asine's relations with the west during this period are illustrated especially by the coarse, incised pottery and by a spear-head (fig. 182: 2).

As an explanation of the livelier contact of the M. H. III culture with the adjacent culture areas at the beginning of M. H. III, I am inclined to assume a fresh invasion of Europeans, Achaeans, shortly before 1 700 B. C. This fresh supply of Indo-Europeans penetrated down the road through Thessaly — cf. the pictures of horses and carriages on the stelae of the shaft tombs from Mycenae. Thessaly's isolation is broken and we are able at Asine to declare a fresh species of pottery, which obviously has its counterparts in Thessaly, cf. p. 279, and its pre-stages farther up in the Balkans, the here so-called Achaean pottery. The relations are likewise obvious in other pottery products (nobbed ware). Through this access of population the inhabitants on the Greek mainland found themselves forced to seek fresh homes, and I am inclined to put the destruction which passed over all the palaces in Crete in about 1 700 B. C. in connection with an expedition of war from the mainland. In the very fact that the glossy colour gradually during this period is once more elevated to a complete victory on the mainland, and that the Matt-painting disappears, we must see Cretan influence.

As regards the M. H. architecture, we have a three-roomed, rectangular house from M. H. I on Terrace III (House T). Even during later periods the rectangular building is the customary one, and large rooms of a megaron type might be assumed. Nevertheless, House B in the Lower Town, which had a curved side out towards the

little lane that separates it from the larger complex on the other side (House D), with parallels in Phylakopi II, attracts particular attention (cf. p. 72).

The transition from M. H. to L. H. is marked not by any sharp break in development, nor by fire strata. A certain continuity is seen also from the funeral rites, earth-cut and cist tombs, cf. p. 341.

Regarding the L. H. period, we have however at Asine, just as little as elsewhere, been able to demonstrate actual L. H. I and II strata, but on the other hand considerable L. H. III strata. Of course, the excavation of the L. H. area in the northern part of the Lower Town has not been carried right through the L. H. strata, but was stopped in typical L. H. III strata, as the finds on settlements from the Mycenaean period clearly show; that older settlement or cultural layers exist, is evidenced by the content of the chamber tombs. Even if thus for the time being, emanating from the material available from Asine, it is not feasible to prove conclusively, the question nevertheless forces itself upon us whether the basis of the current division into periods is quite correct. In those spots where observations could be made it seems as if the so-called L. H. III pottery were a direct continuation of the latest M. H. It seems as if the same existed as a domestic ware alongside L. H. I and II, which in reality had only been »rich-man's» pottery. We should therefore, in my opinion, observe a certain amount of circumspection in the use of L. H. III sherds as a criterion for dating; they are no such thing of the same kind as L. H. I and II. The Swedish excavations at Berbati-Prosymna, which is proceeding just now, will supply important material for illuminating this problem. For further particulars, see the aforesaid work by Furumark, »The Mycenaean Pottery». — To the most important finds belong also the rim of a bowl with the already well-known inscription from L. H. III.

Quite a series of interesting and complicated blocks of houses from L. H. III have been laid bare in the excavations cf. p. 74—81.

Important material have first and foremost supplied the Proto-Geometric tombs at Asine. The transition from L. H. III to the Geometric culture period is marked by the Doric migrations, and a fresh, strong dilution of the earlier mixed population with Indo-European elements, which nevertheless, just as little as the Achaean migration, entailed any abrupt break in the development. The fresh element of population at Asine, just as little as elsewhere in Greece, can not be combined with cremation of the dead, a custom which clearly later on penetrates from the East. For burial cult see also p. 422.

The pottery contents of the Proto-Geometric tombs are divided into two definite groups, firstly one previously known, and secondly a perfectly new type, which is here termed Doric pottery. Some of these transition vessels, e. g. »Salamis-gattung» join both in respect of shape and decoration more closely L. H. III, and might form a reason for the term »Sub-Mycenaean», others, again, hint at the pottery of the Geome-



tric period, and are actual »Proto-Geometric« vases. The two types occur occasionally in the same tomb alongside each other, and, together with them the so-called Doric pottery, why there can be no doubt of the latter's dating. The vases which belong to the latter group are all hand-made, without the aid of the potter's wheel, and display coarse, faintly articulated shapes. The cups in their primitiveness resemble mainly a translation from wood to clay pottery, the jugs, which as a rule have small proportions and are provided with a trefoil mouth on a neck which gently passes over into the body of the vase, remind us chiefly of a translation from leather to pottery. The surface, which throughout is glossy, also makes a leathery impression. Both the forms of the vases and the circumstance that the vessels have been produced without the potter's wheel, strike one as surprising at this time, when the potter's wheel had been in use for over half a millenium at Asine in the making of vases of this size. I cannot find any better explanation of these circumstances than that the Dorians, who immigrated from the northern Balkans, where analogies of the pottery are to be found, are the originators of this primitive pottery.

The ordinary Proto-Geometric pottery joins the latest L. H. III pottery. The most characteristic, new feature we encounter here is the relatively high foot which the Mycenaean open bowls and cups have been given. Furthermore, it should be pointed out that the decoration of the Proto-Geometric vases as a rule has been concentrated to a comparatively narrow belt in the handle-area, while the vessels otherwise are entirely painted. The most commonly occurring decorative patterns are zig-zag lines and lattice-filled triangles. On the developed Geometric vases the decoration encroaches more and more at the expense of the black surfaces. The entire vessel is divided gradually into narrow zones which are filled in with all sorts of geometrical, lineary patterns, a distinct *horror vacui* being noticeable. It is not until comparatively late that we encounter figures within the geometrical decoration of the vases. Nevertheless, as the closed finds show, simple domestic ware, such as cups and minor jugs, have also during the latter period been altogether or for the major part been coated with paint. An interesting example of late Geometric Argive pottery is supplied by the large amphora (fig. 223: 1), a worthy pendant to the Dipylon-vases in Attica. Some jugs with vertical circles in groups on the sides of the vases' bodies have their immediate parallels in the East, and it is quite natural to seek the origin of this pattern in the so-called barrel-shaped jugs and pilgrim flasks which occur during the Iron Age, chiefly in Cyprus.<sup>1</sup>

The remains of Geometric houses found join very closely the Mycenaean but in those cases where they superimpose directly Mycenaean houses the walls are of a far inferior construction. However, the Geometric house on the acropolis superimposes direct a Mycenaean house, and it seems highly probable that close to House H in the

<sup>1</sup> For the large amphora, cf. The Swedish Cyprus Expedition II, 1936 p. 81, Pls. XIX, 1 and CXL, 1.

Lower Town we have another early Geometric house of the same type as the L. H. III houses.

After the catastrophe which about the year 700 B. C. passed over Asine the town lay deserted for almost the next 400 years. Finds from this period are lacking practically altogether. Shortly after 300 B. C. Asine received a population of fishermen and peasants. To judge from the vases, and also from lamps and minor finds, a fairly large settlement seems to have existed here, chiefly in the 2nd century B. C. It seems as if the place, similarly to many other localities which played a role in older times, chiefly Mycenae itself, had once more come into its own in the days of the Achaean League. Then the citadel was given its formidable fortress wall, and even the Lower Town was surrounded by a wall. The importance of Asine as a strong place was, however, this time very brief. When the Romans in the year 146 B. C. made an end of the Achaean League, the fortifications were again allowed to fall into ruins. The small bath which grew up in Roman times in front of the main entrance into the citadel, destroyed partly the monumental stair that leads up to the gate. The baths in the Lower Town date back to Roman days.

The preceding remarks call for some reflections and considerations.

None of the tombs of the Lower City can with any certainty be dated to E. H. Period. On the other hand the investigations, both on the acropolis and in the Lower Town, have given evidence of considerable settlement during this period. Obviously, the contemporary tombs must be looked for in areas that have not been touched by the researches.

Amongst the tombs of the Lower Town the children's graves are, in relation to those of the grown-ups, strikingly numerous; this holds good especially about the M. H. and L. H. tombs. Of the 10 L. H. tombs 9 are children's tombs. The majority of the tombs that have escaped the attention of the investigators, have, of course, been those of children. The number of children and infant mortality has obviously been very considerable at Asine in those days.

The children have as a rule been buried in a simpler manner than full-grown persons. This holds good also for the said periods. Of the 25 cist-tombs from M. H. time only 5 are those of children, while of the 66 earth-cut graves 45 contained skeletal remains of children. All the 6 pithos tombs, on the other hand, are those of children. This burial custom does not seem to have been employed for grown-ups. Of the earth-cut L. H. tombs 8 out of the 9 are children's tombs. The only cist-tomb of the Lower Town is also a child's tomb. The grown-ups seem as a rule to have been buried in chamber-tombs on the acropolis on Mt Barbouna.

Grave cult has been very varying. But some principles seem more clearly distinguishable. Of the M. H. tombs, 54 have — in so far as has been possible to determine by the position of the skeletons, contained one skeleton in a contracted position, whereas only 5 skeletons were in an out-stretched position. The direction of the head varies

a great deal. The orientation very likely means that the dead had been placed purposely in such a position that the face was turned to the west, towards the setting sun. Finally, it should be mentioned that the skeleton is often lying on a bedding of shingle or small pebbles. This has been noticed in 17 cases, both in cist-tombs and in shaft and earth cut graves.

The L. H. tombs are too few in number to admit of any general conclusions. Nevertheless, it should be noted that cist burial still occurs, but that the earth-cut graves predominate. The contracted position still occurs alongside with out-stretched position. In those cases where the position of the skeleton could be more thoroughly studied the face was also turned to the W.

During the Geometric time burial in a coffin predominates, now in full-sized coffins in contradistinction to the short one from M. H. times, though earth-cut graves still occur (8:38). Finally, it should be noted that also during this period, though more rarely, the corpse was placed on a bed of shingle.

Out of the tombs from Hellenistic and Roman times only 3 are cist-graves, the remainder earth-cut, with a covering of large tiles or bricks characteristic of these tombs. In 8 cases the position of the skeleton could be determined, all of them lying on their backs and with the head to the S.W. The corpse had thus its glance directed to the east, thus according to the Christian custom. There is a great deal which speaks in favour of one or another of these tombs being those of Christians.

# APPENDIX

## NOTES ON THE MAP OF ASINE, FIG. 1.

BY ERIK LJUNGNER, Ph. D.

When I was asked to join the 1924 Asine expedition as cartographer the immediate question became what instruments had to be taken along. This question in its turn depended upon the method that should be employed. As regards the detail surveys, I determined very soon on a graphic rendering by means of the measuring table and the Swedish (Ljungström) diopter, which with the ordinary diopter rule with the Reichenbach hairs connects a distance scale of such a nature that it reduces automatically the distances recorded to horizontal distances, no matter what angle of altitude the bearings may have.

The selection of a method for drawing up a base-net was somewhat more difficult. The ordinary method of drawing up maps of areas of this size — the staking out of base-lines and their measuring with tapes — seemed not so very suitable for the terrain in question, which according to photographs taken by previous expeditions was found to be extremely undulating. On the other hand triangulation in the ordinary way would force me to take along an extra diopter and would also entail interruption in the field work for computing the trigonometric base-net before the detail work could be started. I then thought of trying graphic triangulation with the aid of the diopter and the measuring table. Therefore, no theodolite was taken along.

### *The Base-Net.*

On the spot was by way of experiment staked out a triangle-net, which after preliminary measurement with a compass was slightly adjusted for obtaining suitable angles. The triangle-side I—II was intentionally laid along the high-road for the purpose of being used as a base. It was measured with a steel tape twice and found to be 518.17 m (fig. 1).

The diopter table was set up in all triangle points, carefully plumbed and horizontalized, and on a separate sheet of paper for each station were drawn the bearing lines to other visible stations. On a large sheet of paper, on which the bases had been drawn on a scale of 1:1 000 (surveying scale) were transferred graphically the angles, and





that the difference was less than 0.1 m. In order to obtain a sufficiently obtuse section on the acropolis the stretch VI—VII was considered to constitute too small a base. From IV and VII (with control from V) was therefore set out point VIII. From VI and VII, and with control from VII, was set out point IX on the acropolis. (A distance record VII—IX in the diopter agreed with the graphically arrived at value.)

Since, as has previously been stated, from every station all the signals visible from there had been checked, a much more far-reaching control of the triangle-net has been obtained than has been noted for each triangle.

Simultaneously with taking the bearings between the aforesaid 9 stations, which constitute a first grade triangle-net, there have been taken bearings of signals or already existing objects which have not played any part for the construction of the aforesaid triangle-net, but on the other hand as second grade points constituted a good support for the detail survey. The most important of these is the northernmost wall-corner of the acropolis, called X, and set out from VI and VIII with control from VII. This point could not be seen from IX, nor from any point on the acropolis where point X could be seen. But connection was made in the detail survey, when, issuing from IX after many changes of the surveyor's table, X was reached with an error of 0.5 m, which is 0.5 mm in the survey-scale.

As a final judgment it may be said that the method of graphic triangulation has stood the test unexpectedly well, and that the errors of the base-net (likewise those of the second grade) fall below those errors with which one has to reckon in fine-drawing and printing the map.

### *Detail Survey.*

The detail survey should, in my opinion, at least in so far as it concerned the acropolis and the Lower Town, apart from a representation of the cultural objects in the field, supply a reliable picture of the ground, so that one can see at once in how far nature itself constituted a defence and in how far it had to be re-inforced and strengthened. In other words, the map shall, without any further comments being needed, motivate the erection of walls and towers precisely where they are. It must therefore be possible at every point on the map to read from the density of the curves the degree of inclination and to decide accessibility. From this it also follows that where the virgin soil has been buried by superimposed cultural material, the curves have to be plotted along the former and not after the latter. The stately wall which in the north blocks the way up to the acropolis, is, by way of example, along its entire length located on a natural ledge which nevertheless by rubble from cultural material is very much concealed. If the curves were plotted after the cultural soil, one would be misled by the map to believe that the location of the wall was arbitrary.

In the process of the detail mapping there has been used for surveying on the level a surveyor's table with diopter, whose Reichenbach hairs have been repeatedly adjusted, and for altitude measurement a thoroughly adjusted Tesdorph diopter. The latter has its reference lines engraved or incised on the glass, which was found to be an advantage in this climate.

For that part of the map which, with the assistance of Messrs. E. Lindskog and P. Janse, I measured in detail, namely the acropolis, the whole shore and the southern and south-western slopes of Mt Barbouna the distance measurements and altitudes have been carried out simultaneously, in that a surveyor's table, another surveying instrument and a third lath were being utilised. In order to direct the selection of the points in the best possible manner I myself looked after the dumpy level. Mr. Ilj. Larsen, who had carried out the detail survey of the Lower Town and Mt Barbouna, himself looked after the two diopters, in that he has levelled a series of points which immediately after were inserted on the surveyor's table.

The western shore of the acropolis was surveyed as far as it could be seen, from a point close to VI. The point that could be seen from here was measured from stations on the upper edge of the steep slope by means of a horizontally elongated staff, from whose outer end a plummet was suspended down to the water-line. For surveying the south-eastern shore a sufficiently good view was obtained from a couple of projections on the plateau of the acropolis. The man with the graduated lath was rowed about in a boat. The steep slopes, too, are thus rendered accurately.



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